# JIM DANFORTH SPEAKS OUT!

**STARLOG** *presents*

# CINEMAGIC™

## THE GUIDE TO FANTASTIC FILMMAKING

## SPECIAL: STAGING STUNTS

Car Crashes and Fight Scenes!!!

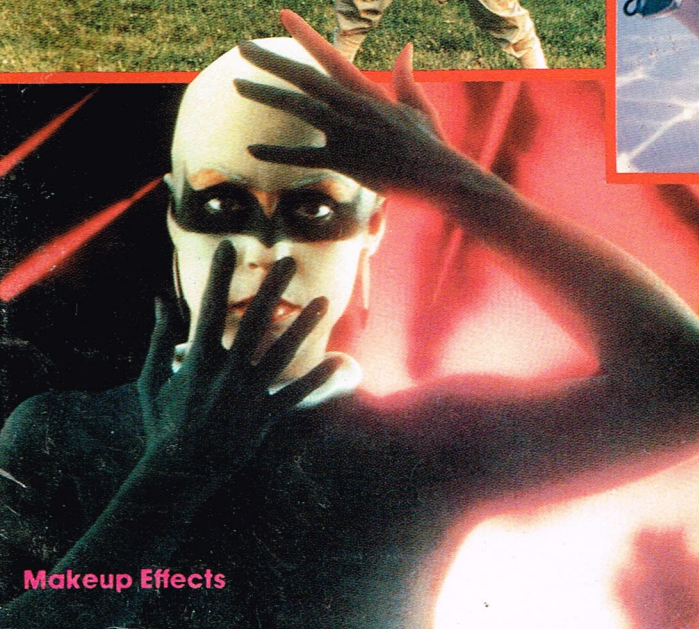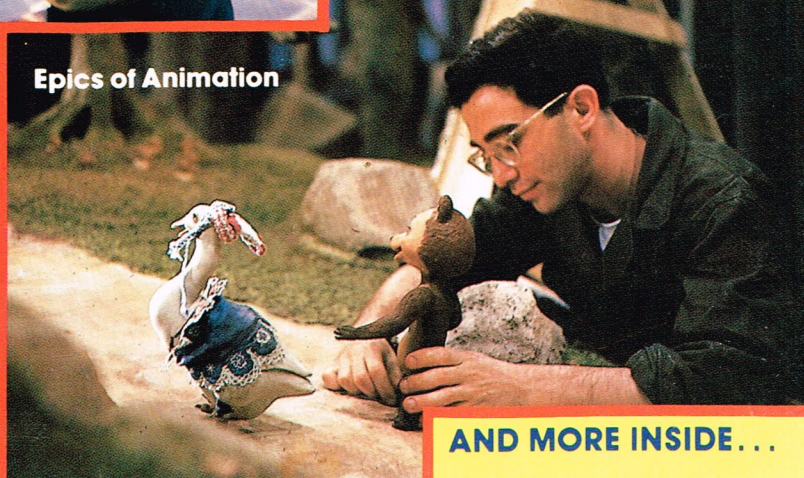Stop Motion Rock Video

Shooting Underwater

Easy Laser Effects

Epics of Animation

Makeup Effects

AND MORE INSIDE...

# CONTENTS

**About the Cover:** (Clockwise from top left) A spectacular car crash stunt from *Courier Express*, an independent short directed by Roger Nygard, (see page 50); animator Peter Wallach touches up a break dancing stop-motion skeleton from the Jacksons' latest video, *Torture* (see page 46); create your own laser blasts with Jack Imes' easy-to-build beam splitter effects box (see page 65); the late animator Danny Diamond positions a puppet for a scene in *Hansel and Gretel* (see page 22); plastic bald pates are a very effective and inexpensive makeup technique (see page 54); Two members of the Action Unlimited Stunt Team battle it out in a short film from Constellation Productions (see page 44); **center panel:** actress/model Nikki Stonoff shoots underwater with a Super-8 camera in an EWA-Marine flexible plastic underwater housing (see page 26).

# Editor's BENCH

## Our Second Big Issue

After the success of our first double size issue (#27) with its eight pages of color illustrations, the publishers of CINEMAGIC decided to double even that generous allotment to 16 pages. So for this issue there are *two* 8-page color sections.

This issue opens with a rather long article by Ralph Langer, a teacher at the North Hills High School in Pennsylvania, who supervises a very active Super-8 film production program. His students have produced a number of high quality award winning films and he credits much of his group's success to some very professional methods of organization. While good organization and planning will not guarantee an award winning film, poor planning will most certainly undermine the most creative of efforts.

Filmmaker and frequent CINEMAGIC contributor John Dods has been very busy these past two months creating special effects for an independent production. As a result, part two of his lengthy interview with the well known animator and filmmaker Jim Danforth has been postponed until next issue. Instead, Danforth, himself has written an article in reply to my highly controversial cover story "Is Stop Motion Dead?" which appeared in issue #26.

Michael Myerberg's stop-motion puppet version of Humperdink's *Hansel and Gretel* opera is almost completely unknown today. It is rarely seen on television and is screened only by the most esoteric of revival houses. But the film is available on videocassette from Media Home Entertainment to be bought or rented. True, the quality of animation varies considerably from scene to scene, but even at its worst, it is still better than the Rankin-Bass puppet films that are trotted out every holiday season. I urge anyone with a serious interest in animation to review this unrecognized classic.

Another animator whose name is known to relatively few, but whose work has delighted millions is Pete Peterson, whose career is surveyed in this issue by writer and animator Paul Mandel. It wasn't until I read this article that I learned that one of my favorite moments in animation was created by Peterson. The sequence is in *Mighty Joe Young*. Joe is riding on the tailgate of the escaping truck gaping at the scenery and drumming his fingers on his knees. The action is at once natural, oddly human and utterly endearing. Though the moment is not as spectacular as the burning orphanage sequence or the night club scenes, I've never forgotten it.

Other cover stories include an article on staging fight scenes for the camera and a look at an amateur car crash sequence. Adventure films have become very popular recently and so have fights and stunts. While choreographed fight sequences are well within the range of the young filmmaker, I certainly do not recommend inexperienced filmmakers tackling such extremely dangerous stunts as car crashes. Still I thought it would be interesting to take a brief look at how a low-budget crash was achieved.

In addition to the eagerly awaited release of two big SF spectacles—*2010* and *Dune*—this holiday season is the re-release of my personal favorite of the Disney animated films, *Pinocchio*. Several weeks ago, the Disney archives made available a number of never-before-published color slides taken at the Disney Studios, while *Pinocchio* was in production in the late 1930s. The pictures have been divided between STARLOG #90 and this issue of CINEMAGIC to illustrate retrospectives on what has become known as Disney's most lavishly intricate animated adventure film.

Just as we go to press the winners of the 1984 CINEMAGIC/SVA Short Film Search were selected during a final screening at the School of Visual Arts. Look for the results in an announcement in our new Festivals section. This new regular feature will carry announcements of festivals and competitions for the Super-8 and 16mm filmmaker. I urge all such competition chairmen to advise us at least six months in advance of any such event. Look in our next issue for coverage of this year's gala award's ceremony and screening which is once again being held in Lincoln Center, here in New York City.

—David A. Hutchison

# EXCITING MOVIE TIE-IN MAGAZINES!

**Official Movie Magazines** are packed with interviews, articles, behind the scenes information and dozens of color photos! 64 pages!

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    SYLVESTER STALLONE $3.00
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    SPACE FANTASY $1.50
JOANIE LOVES CHACHI $1.95
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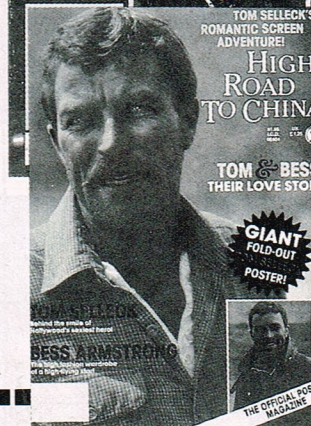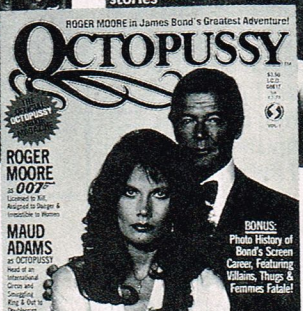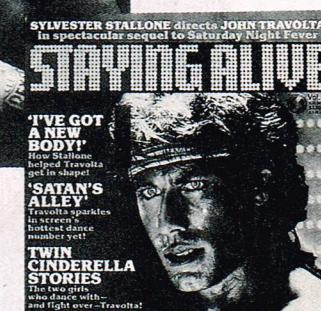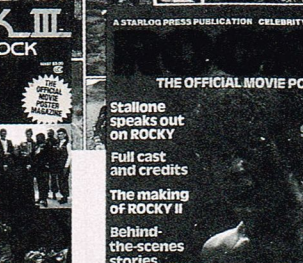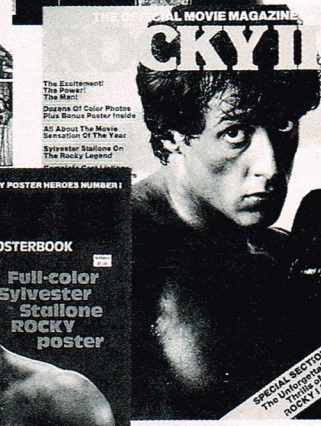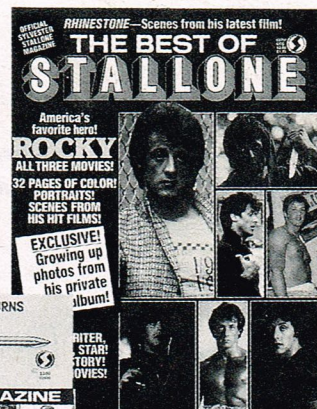
# Filmmaking the Professional Way

*North Hills High School has adapted many professional methods of organization in order to produce the best looking film possible.*

By RALPH LANGER

There are many philosophies on planning films. Some filmmakers get an idea, a camera, some actors and just film. The results can be refreshing and spontaneous. However, many times the results are rambling, tedious, and amateurish.

*Organization* is the key in the North Hills High School filmmaking classes in Pittsburgh, Pennsylvania. Every shot is planned before the film is made. The entire film is on paper before filming begins. This technique gives a film a head start. If the script is good, the finished film has a chance of being good. If the script is poor, the finished film will probably not be much better. There is still plenty of room for spontaneous changes during production if better ideas are produced.

Many films are produced each year at North Hills using this technique—including the 1982 CINEMAGIC/SVA Short Film Search first prize winner, *An American Werewolf in High School. Jaws '80* and *Basement Blossom Special* were recently shown on the *Livewire's* third Student Film and Video Festival on The Nickelodeon Cable TV Network.

## Pre-Production

Planning and accurate paperwork is the key to getting your production organized and under control. Professional filmmakers always start with a treatment—and it shouldn't be any different for amateur and independent filmmakers.

The first step in planning a film is to write a film treatment. This is a paragraph, or a short-story version of the story that will be filmed. The film treatment should have a beginning, middle and a conclusion. Do not write what you cannot produce. Be realistic. If you are in school, have a member of the English or Literature department critique your work.

Professional scripts go through many rewrites before they are filmable. Even then, the scripts do not always work as

## SCRIPT SHEET FORM

| DATE F/STOP CAMERA MAN | | SHOT NO. | SECOND | TYPE SHOT | SOUND | DESCRIPTION OF SHOT | SKETCH |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
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finished films. After the film treatment is written, gather a group of friends together for a brainstorming session to make the idea even better. Discuss the story from all angles. If ten people discuss the story, that's ten ideas and ten points of view that differ. If any section of the story is flawed, this is the time to find these flaws and correct them. Any questions the audience would have should now be answered in this planning stage.

When you are satisfied with the film treatment and all questions have been answered, then the script should be written.

At my school, we use montage editing techniques. The story is told shot by shot using visual acting rather than dialogue. Later, during post-production, the silent film is edited and sound striped.

Wild sounds, music and narration are matched to the film. We only use a sound camera and sound movie film when it is necessary for synchronized dialogue to advance the story. Eighty-five percent of a student film is visual using montage editing techniques. Fifteen percent of the film is synchronized dialogue (see the example of a **sample Script Sheet Form**). The film treatment will be transferred and detailed shot by shot on this form. When this is complete, the entire movie will be finished on paper. The finished film should be visualized in the mind as it is written.

The following information should be filled in on the script sheet form:

**Date, exposure and cameraman.** This is filled out during production noting when the shot was filmed, the f/stop, and who filmed the shot.

**Shot number.** A shot describes a piece of film from the time the cameraman starts the camera until he stops it. Each shot is numbered in sequence on the script. The average length of a shot without dialogue is three to six seconds. Shots that are six seconds and longer could be boring to look at if nothing interesting is happening on screen. Longer shots are permissible only if the camera is following an action.

**Seconds.** By estimating the length of a shot, the running time of the finished film can be estimated.

**Types of shots.** Three categories will be listed in this space: the basic shots, camera angles and camera movements.

First, the basic shots:

**Close-up.** Only the face from the top of the head to the shoulder is on screen.

**Extreme close-up.** A close-up section of some part or parts of the face or body, such as, the eyes or the mouth fill the screen. A shot of finger tips turning a doorknob is also an extreme close-up.

**Medium shot.** A person from the top of the head to the waist is shown on screen.

**Long shot.** A person from the top of the head to the feet is shown on screen.

**Extreme long shot.** More background and less person is seen on the screen. The person is far in the distance in this shot. An extreme long shot can also be used as an
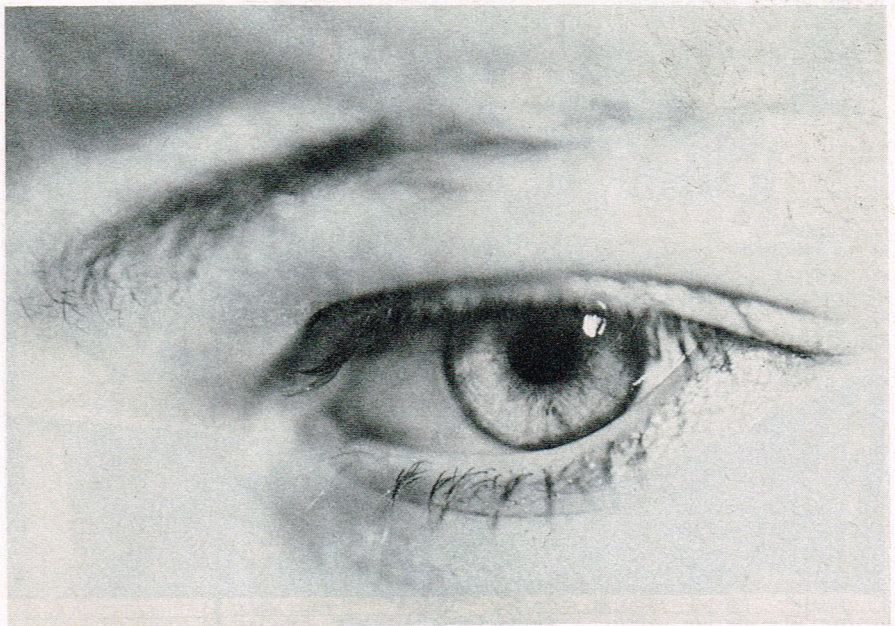


**EXTREME CLOSEUP SHOT**



**CLOSEUP SHOT**



**MEDIUM SHOT**

PHOTOS: COURTESY OF RALPH LANGER

**LONG SHOT**



**EXTREME LONG SHOT**
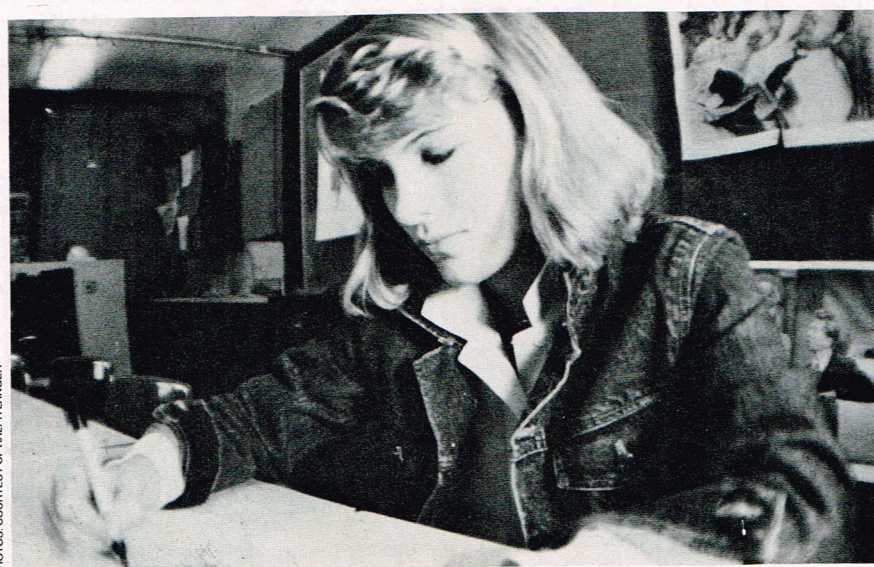
**EYE LEVEL ANGLE SHOT**

*establishing shot* to begin the movie because more of the film's location is seen.

**Point of view shot** A shot as seen through the eyes of the actor.

Then there are the camera angles:

**Eye level angle.** Filming from a normal standing position with the camera on the tripod at eye level.

**High angle.** Filming from above eye level. The camera is positioned high on a table top, ladder, or window of the upper floor of a building. The cameraman shoots down at his subject. This can give the psychological illusion that the people being filmed are being looked down upon and are of little importance.

**Low angle.** Filming from below eye level. The camera is positioned low on the tripod or possibly on the floor. The cameraman shoots up at his subject. This can give the psychological illusion that he is of greater importance.

**Tilt angle. (oblique)** Filming with the camera slightly tilted to the side gives the psychological illusion of imbalance. This creates tension in the scene because it is an unnatural way of looking at things. This angle is used in thriller movies and should not be overused.

**Pan.** The camera pivots right to left or left to right to either show a panoramic view or to follow the movement of a person or object. A pan should start with something of importance and end with something of importance. A pan should not be ended without a good reason. A good pan should be done slowly and smoothly and there should be no camera shaking. Practice panning before filming the shot.

**Tilt.** A movement in which the camera pivots up or down. It should go from one object to another. For example, film someone's feet, then tilt up slowly and smoothly to the person's face.

**Boom.** The camera is physically lifted off the ground toward the sky or from the sky toward the ground. A simple boom can be suggested if the cameraman kneels down, then slowly stands up while filming.

**Zoom.** The zoom changes the focal length of the camera lens which alters the magnification of the image. The subject appears farther from and closer to the lens as the zoom knob is turned from wide angle to telephoto. Too much zooming is considered "visual noise." The zoom should be used sparingly and only for effect. A zoom can be hidden by panning at the same time. Editing between two different zooms also helps hide them.

**Dolly.** A dolly is a wheeled platform that fits underneath the tripod so the camera can be smoothly pushed. A cart, a wheel chair, or office chair with wheels can also be used. The dolly can only be used on smooth floor surfaces, otherwise the camera will shake too much. Plywood can be laid to get smooth dolly movements on rough surfaces such as grass or rough sidewalks. The following are considered dolly movements: 1) Moving the camera

# STORYBOARD FORM

STORYBOARD
_____

TITLE: _____
DIRECTOR: _____
ARTIST: _____
PAGE: _____

| Sketch | Sketch |
|--------|--------|
| NOTES: | NOTES: |

| Sketch | Sketch |
|--------|--------|
| NOTES: | NOTES: |

| Sketch | Sketch |
|--------|--------|
| NOTES: | NOTES: |

# PHOTO EQUIPMENT FORM

NAME OF PRODUCTION _____ WEEK OF _____

## PHOTOGRAPHIC EQUIPMENT FORM
To be filled out by the cameraman before & after *EACH* class.

| | MON. | | TUE. | | WED. | | THURS. | | FRI. | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CAMERA (Before class)** | | | | | | | | | | |
| Make of camera? | | | | | | | | | | |
| Color code? | | | | | | | | | | |
| Is lens cap on? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Is filter insert there? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Set at 18 FPS? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Batteries good? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Camera turned on? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Set between + & 0? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Light meter working? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Film stock used? | | | | | | | | | | |
| Is the film in the camera? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Does lens need cleaning? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Is filter key to be used? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Does everything work? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| If everything's OK, sign here. | | | | | | | | | | |
| **CAMERA ACCESSORIES** | | | | | | | | | | |
| Filter key | OUT | IN | OUT | IN | OUT | IN | OUT | IN | OUT | IN |
| Tripod | OUT | IN | OUT | IN | OUT | IN | OUT | IN | OUT | IN |
| Cable release | OUT | IN | OUT | IN | OUT | IN | OUT | IN | OUT | IN |
| Macro lens | OUT | IN | OUT | IN | OUT | IN | OUT | IN | OUT | IN |
| Lights—How many? | | | | | | | | | | |
| Extension cords, how many? | | | | | | | | | | |
| Fisheye Lens | OUT | IN | OUT | IN | OUT | IN | OUT | IN | OUT | IN |
| Dolly | OUT | IN | OUT | IN | OUT | IN | OUT | IN | OUT | IN |
| Other Equipment . . . | | | | | | | | | | |
| **CAMERA (After class)** | | | | | | | | | | |
| How many feet used? | | | | | | | | | | |
| Is roll finished? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Is lens cap on? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Is filter insert back on? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Is camera turned off? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Does light meter work? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Is film out? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| Equipment in good shape? | YES | NO | YES | NO | YES | NO | YES | NO | YES | NO |
| SIGN your name if OK. | | | | | | | | | | |

# PRODUCTION SCHEDULE FORM

NAME OF PRODUCTION: _____ WEEK OF: _____

## PRODUCTION SCHEDULE
To be filled out by the Production Secretary *EACH* day.

| PHOTOGRAPHIC CREW | MON. | TUE. | WED. | THURS. | FRI. |
|---|---|---|---|---|---|
| Director | | | | | |
| Cameraman | | | | | |
| Gaffers | | | | | |
| Grips | | | | | |
| Actors | | | | | |
| | | | | | |
| Extras | | | | | |
| | | | | | |
| Production Assistant | | | | | |
| Production Manager/ Continuity Director | | | | | |
| Special Effects | | | | | |
| Others | | | | | |

### POST PRODUCTION

| | | | | | |
|---|---|---|---|---|---|
| Editor | | | | | |
| Titles | | | | | |
| Sound | | | | | |
| Others | | | | | |

# PRODUCTION NOTE FORM

NAME OF PRODUCTION _____ DIRECTOR _____

Film roll# _____ Page _____

(USE CIRCLED TAKES ONLY)
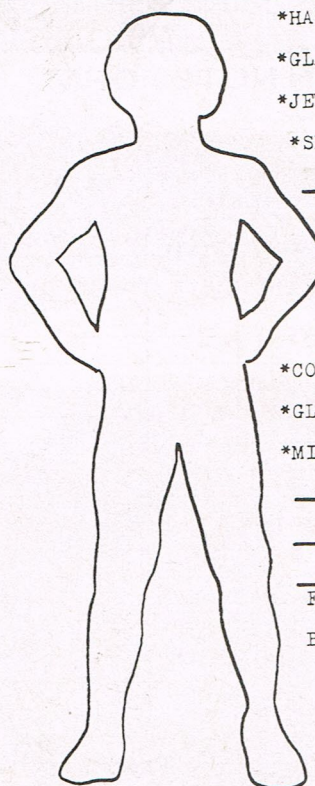
| SHOT NO. | TAKE | f STOP | CAMERA-MAN | DATE FILMED | NOTES |
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| LOCATION _____ | | | | SHOTS _____ TO _____ | | |
| NAME OF FILM _____ | | | | _____ TO _____ | | |
| DIRECTOR _____ | | | | _____ TO _____ | | |

| ACTORS | COSTUMES | EXTRAS | PROPS | SPECIAL EFFECTS | SOUND | SPECIAL EQUIPMENT |
|--------|----------|--------|-------|-----------------|-------|-------------------|
|        |          |        |       |                 |       |                   |
|        |          |        |       |                 |       |                   |
|        |          |        |       |                 |       |                   |
|        |          |        |       |                 |       |                   |
|        |          |        |       |                 |       |                   |

**LOCATION SHEET FORM**

COSTUME CONTINUITY SHEET

NAME OF FILM _____
DIRECTOR _____

*HAT _____
*GLASSES _____
*JEWELRY _____
*SHIRT OR BLOUSE _____

*BELT _____
*PANTS OR DRESS _____

*SHOES _____
*COAT _____
*GLOVES _____
*MISC. _____

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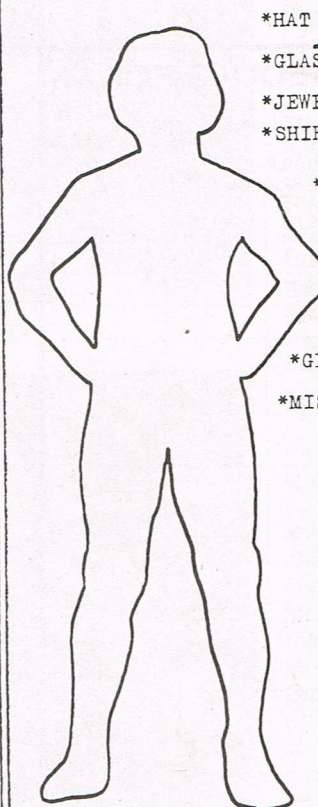
FRONT VIEW ☐
BACK VIEW ☐

CHARACTER _____

*HAT _____
*GLASSES _____
*JEWELRY _____
*SHIRT OR BLOUSE _____

*BELT _____
*PANTS OR DRESS _____

*SHOES _____
*COAT _____
*GLOVES _____
*MISC. _____

_____
_____

FRONT VIEW ☐
BACK VIEW ☐

CHARACTER _____

**CLOTHING CONTINUITY FORM**

toward or away from the actor facing the camera. The actor is seen from a full frontal view. 2) Moving the camera backward as the actor walks toward the camera lens. The camera should move the same speed as the actor walking. The actor is seen in a full frontal view. 3) Position the camera behind the actor as he is walking. Push the camera as the actor walks. The actor's back is seen.

**Tracking.** The camera and dolly are moving parallel alongside the actor as he walks right or left down the street. The camera should move the same speed as the actor. The actor is seen in profile. A car can be used in place of a dolly to move the camera for a tracking movement.

**Zooming/Dollying in opposite directions.** ("The Hitchcock Zoom" or the "Vertigo" effect) This effect can be done with any zoom lens. However, the higher the focal length of the lens, the more impressive the results on screen.

The camera should be dollied toward the actor as the zoom goes from telephoto to wide angle. In other words, the cameraman should zoom out and dolly in at the same time, or he should zoom in and dolly out at the same time. This action will give an unnatural stretching effect of the room around the actor as he appears to stay in the same place. This creates tension and was used in Alfred Hitchcock's films *Vertigo*, *Marnie* and *Psycho*, as well as Spielberg's *Jaws* and Tobe Hooper's *Poltergeist*. Again, this effect should be used sparingly.

**Sound.** Notations of wild sound effects, music, narration or sync sound and dialogue are noted here.

**Description of shot.** This describes in detail the actions that will take place from the beginning of the shot to the end.

**Sketch.** A storyboard sketch is placed here to help the cameraman achieve a required camera set up. However, the sketch is optional.

The finished shooting script will tell the director, actors, and cameraman exactly what to do from the beginning to the end of the film. If the film is shot out of sequence, the script will help the editor put the film together properly.

See the example of the **Storyboard Form.** If the filmmaker is a good artist, the storyboard can be used with, or in place of the shooting script, to plan the composition and movement of the scene. It is a comic strip version of the shooting script. The actions and shots are described in comic strip style drawings. Captions of the actions, camera movements, and shots are listed under each drawing.

The **Location Sheet Form** will organize everything that is needed on location. Before we devised the location sheet at North Hills, students would go to a location and find they had forgotten everything from filter keys and macrolenses to film and tripods. Time was wasted while they went back to get forgotten equip-
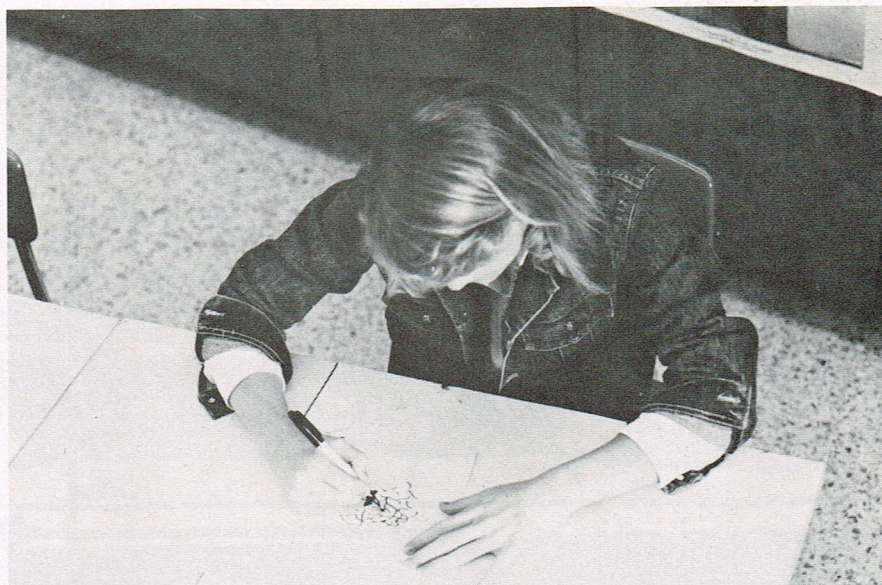


**HIGH ANGLE SHOT**



**LOW ANGLE SHOT**



**TILT ANGLE SHOT**

PHOTO: COURTESY OF RALPH LANGER

## PAN MOVEMENT

ment and props. This location sheet form solved this problem.

If the script lists five filming locations, five location sheet forms will be used, one for each location. The following items will be listed on the location sheets: 1) The location. 2)The shot numbers in the script that will be filmed at this location. 3) The principal actors working at this location. 4) The costumes the principal actors wear at this location. 5) If extras or background people are needed, they will be listed. 6) Every prop from a wrapped package to a wallet should be listed. 7) Optical special effects such as dissolves, fade ins, fade outs, etc. will be listed. Mechanical special effects such as breakable chairs or floating props on fishing line will be listed. 8) Wild sound (non-sync) will be written if the film is to be shot silent. Dialogue is to be written if this is a sync sound segment. 9) All photographic equipment will be listed under "special equipment." Everything from the camera make and tripod to extension cords and extra photo flood bulbs should be listed here. This will be a checklist of the equipment needed at that location.

### In Production

Filming can commence at this point. In the past, we have had students film at the wrong camera speed, forget to turn the camera on, forget to change the light meter from manual to automatic, and each semester, scenes are filmed without film in the camera. As a result, a **Photo-**graphic Equipment Form was devised for the cameraman to fill out to keep these mistakes at a minimum. This form is a check list divided into three sections:
**Camera (before class).** Before class begins the cameraman checks this section of the form to make sure the camera is set at the proper speed, etc.
**Camera accessories.** This is a checklist of camera accessories. Before class the cameraman checks out camera equipments such as tripods and extension cords to go along with the basic camera. At the end of class the cameraman checks in the same equipment to make sure nothing was accidently left on location.
**Camera (after class).** This cameraman checks these items off after class. If this form is adhered to daily, mistakes and forgetfulness will be virtually eliminated.

Since we are a film production class, the jobs change every four days so the students can have a chance to experience all phases of making a film. The **Production Schedule Form** is used to keep track of who is doing what job each day. The class meets 45 minutes a day, five days a week. The students average about three shots in this time. By the time they get their equipment set up, light the shot, rehearse the shot, film the shot and clean up, three shots are all they have time to shoot.

The actors are required to leave their film clothes at school during the production of the film. Imagine what it would look like if the actor wore a different shirt and pants every three shots. It would be a continuity nightmare. We devised two forms for the continuity director, one for costumes, the other for the location.

On the **Clothing Continuity Form,** everything the actor is wearing will be listed on this sheet (from rings and sunglasses, to open shirt buttons and hairstyle).

We once filmed a birthday party scene on a weekend with two of our three actors. We filmed all of the close ups and two shots involving those two actors. The next weekend we fixed the room up exactly the same way and filmed the shots with the third actor who couldn't make it the week before. Our continuity director forgot to note in which shot we had our actors place party hats on their heads. We had to film two takes of each shot showing our actors with and without party hats. If we had not done this, later during editing, the actors would have had a party hat on in one shot (filmed the first week), then it would be missing in the next shot (filmed the second week), and the hat might be back on in the third shot.

Good notes are essential to good continuity especially when filming a movie out of sequence. The **Room Continuity Sheet** does the same thing for the layout of the room as the clothing continuity sheet does for the actor and the actor's clothing. The layout of the room and its furniture is sketched on this form down to the last detail. Everything from the curtains being opened or closed to window

# LOCATION CONTINUITY FORM

LOCATION CONTINUITY _____

NAME OF FILM _____

DIRECTOR _____

# EXTRAS RELEASE FORM

**NORTH HILLS SCHOOL DISTRICT**
**EXTRA'S RELEASE FORM**

I give my permission for my image to be used in the following film, _____ (title of film).

The edited film will be used as either an instructional film in a classroom situation, for airing on cable television's public access channel, and/or as an entry into various film making competitions. The films will become a part of the school district's permanent film library.

| EXTRAS' NAMES | DATES WORKED | | | | |
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# GENERAL RELEASE FORM

Date:

Dear

For good and valuable consideration, receipt of which is hereby acknowledged, you hereby agree to participate as a talent, and we agree to permit you to particapte as a talent in our production of _____ (the "Program"). You recognize that your execution of this form is a condition to and in consideration of our permitting you to be a talent on the Program. You further agree that we may tape, film, and photograph you and record your voice, conversation, and sound during and in connection with your appearance and/or performance and our production and that we shall be the exclusive owner of the results and proceeds of such taping, photography and recording, with the right, forever and throughout the world, to use and to license others so to do, all or any portion thereof and reproductions thereof, and your name, voice, likeness, and biographical material concerning you in connection with the Program, and in the advertising, sale, publicizing and exploitation thereof in any and all media throughout the world.

To the extent you own or control rights in any musical composition(s) performed in connection with such Program or in connection with its performance on the Program (such as videotape, master recording or other material embodying any performance), you hereby grant us royalty free synchronization and performance licenses for the performance of such compositions in the same manner as if it were part of your performance hereunder.

You hereby release and discharge us, our assignees and licensees, of and from any and all claims, demands, or causes of action that you may hereafter have against us, in connection with the use and exercise of any of the rights granted us herein.

Very truly yours,

By _____

AGREED AND ACCEPTED:

Signature _____

Name _____
    (print)

Address _____

Telephone _____

**TILT MOVEMENT**

shades being one-half or three-fourths of the way up should be listed in this sketch.

If the finished film is to be submitted to a film festival or on cable TV, it is advisable to get releases from the actors and extras in order to avoid legal restrictions when getting the film to be shown in the future. See the example of the **Actors/Extras Release Form.**

The **Film Production Notes Form** is filled out by the production secretary. It lists the shots in the order in which they were filmed. If the film is shot out of sequence, this film production notes form will help the film editor get the jigsaw puzzle order of shots back in order.

The following will be listed on this form: 1) The shot numbers will be listed in the first column in the order they are shot. 2) If three takes of the shot are filmed, the production secretary will list each take on a separate line and will circle the best take. This circled take will be the one the editor puts into the finished film. 3) The last column listing "notes" will list why three takes had to be shot. 4) The f/stop will be listed as a record. If the film is returned with over or underexposed takes, these shots can be reshot by manually setting the light meter thus correcting the original error.

At North Hills High School, we have found the more organization we do on our films, the better they become technically because we can spend more time on composing the shot, coaxing our actors into acting naturally and experimenting with lighting.

We also spend less time on details because we already ironed them out in preproduction. The more organized we are, the fewer mistakes we make.

# Filmmakers' FORUM

A regular department devoted to readers' comments about filmmaking, their problems and solutions.

## Vexed Videographers

. . . Jeff M. Smith (my partner) and I are planning to make a 28-minute show about people in New York. It is to be shot on VHS video tape and later transferred to ¾-inch. The project is now in the planning stage but we are very determined to get it done.

Needed for this project are the following: story ideas, stock shots, people who are just interested in helping us out and anyone who has a portable VCR and camera for a one day shoot in Manhattan. If you are interested please write for information.

John Manginaro
23-30 31 Rd. Apt #3d
L.I. City, NY 11106

## New Jersey Film Group Forming

. . . I'm a 24 year old filmmaker with a four year background in film & T.V. production, education, and some professional work experience. Are you finding it difficult to find work in film production? Are you possessed by the Devils that would make you a serious and dedicated filmmaker? Do you have the talent, but can't seem to land that first break-in job? I'm looking to gather people like actors, writers, cinematographers, grips, set designers & builders, makeup, FX (theater people and business people welcome), to produce quality 16mm shorts which could lead to the formation of an independent production company and cash returns with distribution. If you're ready to devote your time, talents, and inspirations within a production company and generate our own work, then the next step is up to you.

Annalisa Productions, Ltd.
c/o William Currier Rose
P.O. Box 235
Manville, New Jersey 08835

## Makeup Artists Wanted

. . . I am a New York University graduate film student and I'm currently doing the preproduction work on my graduate thesis film, which will be a horror film. This short, action thriller will be sho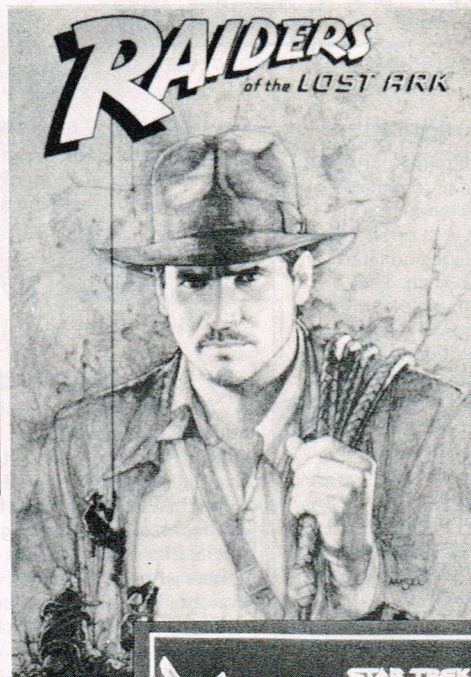t in 16mm color with sync sound. I would like to hear from anyone in the New York or New Jersey area who is involved in special effects makeup who would be interested in putting their talents to work on my film. Please contact me if you are interested.

Ralph Fujiwara
286 Argyle Rd.
Brooklyn, NY 11218
(212) 284-0223

## SPFX Artist Needed

. . . The New York University graduate film department is looking for people with interests or talents in the special effects or special effects makeup fields. Our department is starting a special file for our student filmmakers who are in need of these services. This is an excellent opportunity to display your talents in a 16mm or 35mm film. We encourage all interested parties to submit any pictures or slides of their work, and a resume if possible. Also include an address and phone number where you can be reached. If you are interested, please respond to the address below.

High Tech FX
c/o NYU/GFTV
40 E. 7th St.
New York, NY 10003

## Iowa Filmmakers

. . . I am 14 and want to get into filmmaking. I have a lot of ideas. If you live in my area and are planning to make a movie, please contact me.

Beth Porter
210 Rainbow Dr.
Marshalltown, Iowa 50158

## Texas SPFX Artist

. . . I am a well-trained and experienced artist and model-maker who now wishes to enter the filming and special effects world. I have worked for myself and for rock bands and know a little about film production. In fact, I am now studying film production at San Antonio College. Anyone or group needing my talents—anywhere in the U.S.—please contact me.

John Diaz
5629 Parkcrest
San Antonio, TX 78239

## Milwaukee Moviemaker

. . . I am looking for a film to participate in. Every local club I've joined has gone down the tubes. Not because of me, of course. It's only a freak occurance. Really.

Anyway, I'd like to get involved in films; writing, acting or directing and there is no listing in the yellow pages for "places to call if you want to get involved in films". I have some college training in screenwriting and camera operation. I have three years experience as a stand-up comic.

Any club in Milwaukee, Wisconsin (no comments, please) in need of a body, get in touch.

K. Arthur Haefner
622 E. Conway Street
Milwaukee, WI 53207
(414) 481-6139

## A Data Bank For Filmmakers

. . . After personally experiencing the trouble of finding others to do film work with, and noting in Filmmakers' Forum that others shared this problem, I decided to *do* something about it. I would love to create a database of filmmakers, their main interest (i.e. genre) and area of expertise. Once in my data bank, if someone should need their skills, I can punch up the particular trait needed and send the seeker a list of people to contact.

People who are interested in being placed on my data base should send their name, address, genre(s) and area(s) of expertise to the address below. There is *no cost* involved in being placed on the data base.

People who are interested in seeking another filmmaker with certain requirements (i.e. same state, sound man, model builder, etc) should send me their request with the requirements and a SASE. The only cost for this will be for the thermal paper used by the printer and *it will be nominal.* I anticipate that a "normal size" seek should easily cost no more than 50¢ and many will cost less. To anyone whose searches come out abnormally large (cost over $1), I will send a notice of cost and await verification before sending the results and billing. If a search results in nothing, it will cost nothing. I want this to be a service to budding filmmakers and only make the nominal charge to avoid bankruptcy.

A good search will not be available until an adequate data base is formed. So all you lonely filmmakers out there should write in. I would hope to be in full operation in a month. Remember, all inquiries must include a SASE. The service may also be used for filmmaking pen pals.

Brian K. Kauj.
35 Central Blvd.
Camp Hill, PA 17011

## 20 Questions

. . . I've been making films for the past four years and am now producing a two-hour science fiction film. Unfortunately, there are many problems holding us up.

How can I do matte paintings? Laser beams? Realistic explosions? Cheap but expensive-looking sets?

I would really appreciate any help you can give me. I'm sure it will greatly aid this film and others in the future.

David R. Wright
RR#2 Box #499
Wurtsboro, NY 12790

. . . *Luckily for you, David, the answers to all your questions are in past issues of CINEMAGIC (In fact, a technique for laser FX appears in this issue. See page 65 for details). The issues you need are numbers 10, 11, 12, 16 and 23. You can order them using the handy coupon provided on page 64.*

## Armature Credit

. . . On page 61 of the last issue of CINEMAGIC, in my article entitled "Skull Bashing Made Easy," there is pictured a finished animation armature erroneously credited to me. I did not either design or build that particular armature. To give credit whre it is due, the metal skull was made by Ken Brilliant, the "sub skull" sculpted and applied by John Dods, and the armature assembled by Ken. Of particular note are the very nicely made, professional "collar" joints machined by filmmaker and past CINEMAGIC author John Cosentino of Warren, Michigan.

Also in the same article: The caption accompanying the drawings of the rotary files reads "side crushing bit." Gremlins in the printing press, obviously. It should read, "side cutting bit."

Kenneth Walker
38 Mechanic Street
Somerville, New Jersey
08876

## Denver Director

. . . I would like to get in contact with anyone in the Denver area who is interested in making quality Super-8 films. I'm currently planning a horror film and a science-fiction drama. Within the next year I hope to begin production on a SF epic entitled *Doomsday + 1,* but I'll need to get more people involved before I can begin filming. If you're interested, please write or call me at the number below.

Banshee Films
c/o Randy Zastrow
6700 Van Gordon
Arvada, CO 80004
(303) 422-6529

## More Film Vs Video

. . . I have a beef about Mr. Tim Frayser's letter in the Filmmaker's Forum section in CINEMAGIC #25.

He claimed that ½-inch video was unsuitable for airing on TV. This is not so at all. In fact, for a time at my school, a TV studio had a sign up, soliciting amateur tapes for some show or other. And as for Super-8 being broadcast quality—just make sure you shoot at 24 fps.

What most annoyed me the most was his snobbish dismissal of video as just being something to "play around with." Doesn't he realize a lot of kids may only have their parents' video equipment to work with, just as Super-8 and Regular-8 are inherited? What are they supposed to do, sigh, "Aw, shucks, video's no good," and sit there, despondently drawing storyboards? Come on, Tim, open your mind.

And how about the uses of video in conjunction with film? A while ago, a guy asked you about polarization. I wrote him to videotape the shots, play them back on his TV with the color re-adjusted to whatever extreme he wanted. (The best way to do this would be to single-frame both the video recorder and the film camera—using a timid exposure.) He could then film the TV, and if Super-8 isn't grainy enough to hide the scan lines, he could shoot it a touch out of focus.

Also, let me kill a myth right now. Neither I, nor any of my videographer friends that I know of, record over bad takes to save tape. Ugly ducklings are cherished no what the format.

Henry thor Straten
307 Lambeth Rd.
Baltimore, MD 21228

## Looking for a Break

. . . I have an *incredible* problem. For the past several weeks I have been trying to find the right route into a professional field of special effects. I have run into **too** many dead ends along my search to get into this type of work. For the past several years I have made many models of popular figures from my favorite movies; such as E.T., *ALIEN,* and a moving figure of Jabba the Hutt. I have already went to one year of college, accomplishing nothing, and now that I have decided upon working with special effects I can't find anyone to help me. I have contacted such places as Lucasfilm Ltd. and even the publisher of STARLOG, but to no avail. Would you please tell me how to get into this field of work. There are many people already working with effects, how is it that I can't find any of them?
I'll appreciate any answer you can give me, thanks.

Stephen Brower
Box 38 Main St.
Roxbury, NY 12474

. . . *There is no easy answer to your question. The most important thing you should be doing now is working on your own, putting together a spectacular demo reel. While going to a film school isn't absolutely necessary, it certainly can't hurt, and it will most likely prove very helpful. Going to a college that offers a strong film program will gain you access to equipment that you may not otherwise have the opportunity to work with. The film business is extremely competetive, and a degree from a film school will at least show a prospective employer that you've studied your craft, completed a curriculum and hopefully had some hands-on experience with more sophisticated equipment than an independent filmmaker of modest means would have access to.*

*The most important thing is to have a demo reel that showcases your talents, so keep making films and refining your skills.*

*Tony Laudati, whose film* The White Gazelle *was covered in* CINEMAGIC #26, *is a fine example of how to break into the film business. Tony spent two years making his animated film while he was a student at the State University of New York at Purchase. He entered his film in the student* Academy Awards *competition and won the national award for animation.*

*Tony recently began working at ILM, the Lucasfilm effects facility. He labored for two long years to make his demo reel—which includes such painstaking effects as split-screen dynamation and traveling mattes. Tony made good use of his school's facilities, and dared go beyond what was considered*



"Hey! Chuckie says he's found a way of tying down the animation models without drilling holes on the set!"

*the limits of the 16mm format he was working in and the equipment he had access to.*

*Tony's talent is what landed him a job at ILM, but film school gave him the opportunity to put together a demo reel that showcased his very considerable talent to his best advantage.*

*Aspiring filmmakers and special effects artists should be working as hard as possible at developing their craft and putting together as impressive a demo reel as possible. For most, film school has more advantages than disadvantages.*

*The American Film Institute Guide to College Courses in Film and Television, published by Peterson's Guides, is the best source for choosing a film school. The book may be ordered directly from Peterson's Guides, P.O. Box 2123, Princeton, NJ 08540. The price of the book is $11.50 plus $2.00 postage and handling (4th class mail) or $4.00 postage and handling if you want it shipped via UPS.*

## Backwinding Super-8

. . . I'm desperate for information about backwinding Super-8, but CINEMAGIC #1, which covered this subject, is sold out. Is there any other source for this information? Also, I'm very interested in corresponding with other filmmakers, especially in my area. If anyone is interested in getting together to make films or just corresponding about filmmaking tips, please write.

Mark Matlock
11584 Monte Vista
Chino, CA 91710

. . . *See the Halmar ad in this issue. Halmar sells both the Craven and the EWA backwinders for backwinding Super-8. Information*

*on backwinding comes packaged with these fine products.*

## Michigan Cinemagician

. . . I'm a 13-year-old filmmaker and I'm looking for a backwinder. I work in Super-8 silent, but I may switch to sound, so I'd like a backwinder that accepts both. I've called local camera stores, but they don't carry backwinders. I've seen them advertised in CINE-MAGIC, so I'm writing to you. Also, I want to contact filmmakers in my area. If anyone is interested, please write to the address below.

Scott Giegler
1008 W. Liberty
Ann Arbor, MI 48103

. . . *See the Halmar ad in this issue. You can order either a Craven or an EWA backwinder directly from them. Both of these fine products will accept both silent and sound film.*

## A Direct Line!

. . . *Readers who have access to CompuServe can contact CINE-MAGIC's Editor David Hutchison directly through E-Mail. His User I.D. is 71036,1477. He can also be reached through M.C.I. Mail.* Ⓜ

# Comments on the "Death" of Stop-Motion

## By JIM DANFORTH

**M**ark Twain was once forced to remark that the reports of his death has been "greatly exaggerated." While Twain's humorous remark could instantly and *totally* refute his premature obituary, the obituary for stop-motion is a somewhat more serious matter since the issues involved are not so clear cut.

The viability of stop-motion may, in part, be assessed by noting the number of films currently in release or in production which utilize the process. *Indiana Jones* has stop-motion animation by Tom St. Amand; *Ghostbusters* has stop-motion animation by Randy Cook; *Dreamscape* has stop-motion animation by Jim Aupperle and replacement series animation by Craig Reardon; awaiting release is *Ragewar* with animation by David Allen; *The Terminator* with animation by Pete Kleinow; and coming this fall on ABC is *The Ewok Adventure* with animation by Phil Tippett. In addition, a Christmas TV movie about *Santa Claus* is scheduled to have animated reindeer by Pete Kleinow; and *My Science Project* from the Disney Studio may have some animated scenes of a tyrannosaurus. Also in production are *OZ* with stop-motion by Will Vinton, *The Night Train* with animation by Bill and Robert Stromberg, and *The Stuff* with animation by David Allen. Not mentioned are several other films, large and small, which are in varying stages of development or pre-production.

If stop-motion animation is doing so well, why have I felt it necessary to speak out in support of the process? The answer is that in the film business, as in other areas of life, what is *perceived* as true often becomes more important than what is *actually* true.

Looking at history, we can see examples of politicians, inventors, and scientists whose careers were hampered or ended through discreditation. What has been done to individuals can also be done to a form of expression or a technique. The motion picture industry is infamous for incorrectly deciding what the public does and doesn't want to see—remember science fiction had been declared "dead" until *Star Wars* broke through and became a mammoth hit.

If the press discredits animation by creating the false impression that animation is "dead," it could be creating a self-fulfilling prophecy. I would hate to see this happen.

The pronouncements made by animators at Industrial Light and Magic appearing in a recent issue of this magazine concerning animation's lack of viability have probably done more to endanger the technique than has any recent change in audience perceptions. (See CINEMAGIC #26, "Is Stop-Motion Dead?")

Since I know that both Dennis Muren and Phil Tippett, who are quoted in that article, genuinely enjoy animation, I'm sure it would be a surprise to them to think that anyone would feel that their statements were jeopardizing animation's future.

To some extent, I agree with Dennis when he states that animation may not be acceptable for use in mega-million-dollar films which must please *enormous* numbers of people in order to be financially successful, but I disagree with the implication that there is some other method of achieving the same type of scene which is inherently *more* acceptable.

*All* the currently available methods have weaknesses. A methodology which pleases one person may offend another and vice versa, because *no* technique can create totally realistic fantasy characters in all types of scenes.

Because of the enormous amounts of money made by the various Lucasfilm projects, statements made by members of the Lucasfilm/Industrial Light & Magic team seem to be given an inordinate amount of credence.

Wouldn't it be a shame if those who wished to *do* animation and those who wished to *see* animation were unable to do so because film producers, directors, executives "knew" that there was no audience for the technique.

Animation, like any art or commerce, should be allowed to find its own position of viability without pre-judgment.

It has been said that years ago, when Fred Astaire was attempting to make the transition from stage to screen, it was decided by some who viewed his screen test that he did not possess the looks or

The tylosaur from *When Dinosaurs Ruled the Earth*. The shot is a blue screen live action foreground combined with miniature rear projection, stop motion, and a glass painting.

Illustration for a proposed remake of *King Kong* about 1974. This was prior to the Universal and Paramount versions.

voice which the audience wanted from a film actor. Fortunately, Astaire was given a chance and has spent more than *50 years* dancing, singing, and acting with grace and charm (to the great delight of his *many* fans). He was allowed to find his position of viability. Obviously, Astaire's supposed shortcomings were of more concern to the studio executives than to the audience. But what might have happened if the fan magazines of the day had run articles suggesting that Fred Astaire should stay on the stage? Producers would surely have felt that if even the fans didn't want to see him, why waste the film? If magazines which cater to animation fans suggest that there is no audience for animation, what can we expect from the studios?

To further enlarge the analogy, I'm sure that there were some who *would* have preferred to see an actor more handsome than Fred Astaire, even if his singing had to be dubbed and his dancing doubled, just as there are today those who would prefer to see "man-in-a-dinosaur-suit" or "gremlin-on-a-stick" type manipulations because they are smooth (even though much of their acting and locomotion must be implied by editing!)

Personally, I prefer to see Fred Astaire giving a full-body, *full-talent* performance. Just as I prefer to see the Cyclops striding across Colossa's sunlit beaches, Mighty

Joe Young pulling live cowboys off their horses, or Sinbad battling toe to toe with a living skeleton. To me, this is the *real stuff*, the complete and consummate artistry (no cop-out here!)

This is why I did not find the Rancor Pit sequence in *Return of the Jedi* to be exciting. (See the article in STARLOG #86.) Even though the action was wonderfully smooth, I kept waiting for the "real shots," the exciting set-ups that would show me what was going on—let me see the Rancor search for Luke, spot him, corner him . . . lunge, miss, chase him to the other side of the pit—build to the big climax where Luke tricks the Rancor and gets him killed. I suppose all that happened in the sequence, but it didn't happen for *me*. I felt cheated, I hadn't seen a *performance*—just lots of short pieces of film cut together. I kept thinking that the "real stuff" must have happened in front of some other camera. But they didn't use it. Claustrophobic! (Yes, I know it all happened in a pit, but I wanted to get back and *see it*!)

Now I certainly don't mean to imply that all good action happens in long shots or that clever editing is somehow a "cheat." The point I hope to make is that *there is a poetry of performance of which the human or animal body is capable which is frequently represented in animation, but which rarely appears in the limited or unfocused ac-*

PHOTO: © 1984 JIM DANFORTH
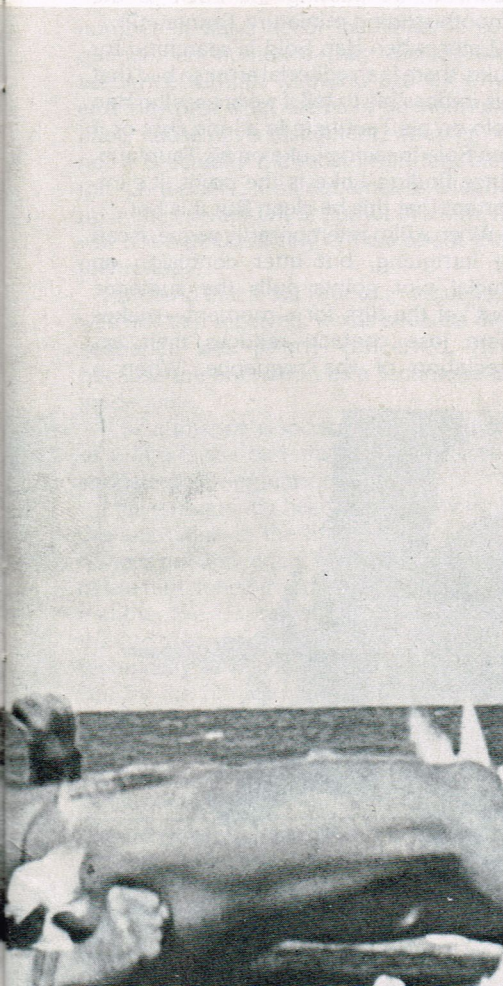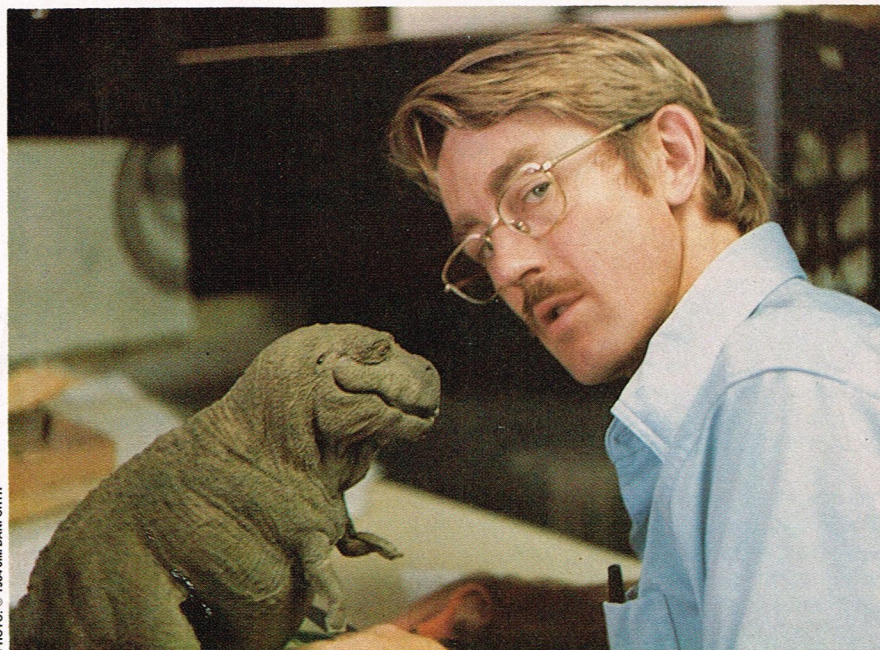
Jim Danforth with the tyrannosaur model for
Caveman sculpted in 1980.

tions of other methodologies

Actually, assuming that the creature animation is at least professionally competent, I believe that good writing, editing and staging (or direction) are far more important than the actual creature movement in determining the audience reaction to a fantasy creature sequence and yet if the sequence is unsatisfactory, the animation is often blamed even when the reason for the sequence's failure has nothing or little to do with the animation. I think this was true of the Tauntaun sequence which Dennis Muren has used as the "proof" that large enough audiences no longer accept animation animals as being sufficiently realistic.

I would like to use the same sequence to "prove" some alternate points of view. Firstly, I must take Dennis' word for it that the Tauntaun sequence was not favorably received, personally, I haven't met anyone who disliked the sequence (other than myself). I think there are several *major* flaws in this sequence, most of which have absolutely nothing to do with the animation.

First, the overall construction of the sequence is weak. It begins with its best shot (possibly the most amazing animation shot which has ever been done). The next two or three animation shots with the wonderful Tauntaun running action are also excellent and then it's all downhill; each shot seems to be less effective than the one before. The matte lines get bigger and the animation becomes less exciting (and I think less well executed technically). This is always bad construction dramatically and is *guaranteed* to leave the audience in a disappointed state of mind no matter how brilliant the first scenes were. Of course, this was not an easy sequence to construct; it's about freezing to death, which involved slowing



PHOTO: ROBERT BOHUS
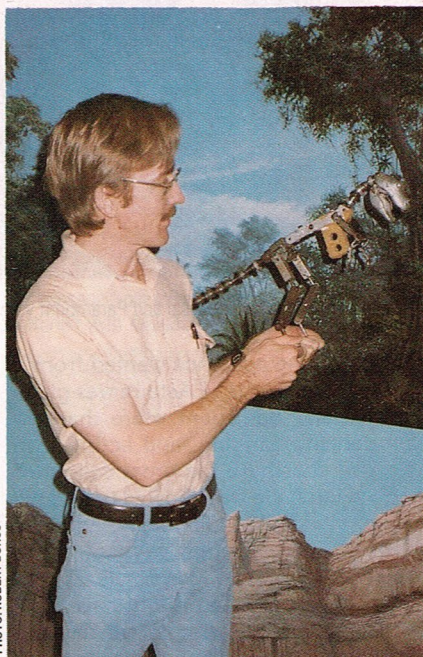
**Above:** Danforth displays one of the armatures from *Caveman*.

down to a *dead* stop. That should have been the filmmaker's challenge—how to freeze the characters without freezing the audience. The whole handling of the sequence (after the first few cuts) seemed timid, even frightened. (Where were the shots of Han Solo vaulting onto the Tauntaun's saddle, digging in his heels and galloping out of the cave to rescue Luke?)

I understand the concept of down-playing certain aspects of a fantasy environment to make them seem more commonplace and real. George Lucas did this brilliantly in *Star Wars*—avoiding all explanations of spaceship drive mechanisms, robotic engineering, etc., which never make sense anyway and only slow a movie down. While it may have seemed a simple extension of this philosophy to down-play the "swell" aspects of the Tauntauns, I think it backfired. True, nobody wants to see a diagram of the skeletal structure of a horse when they go to see a Western, but it *is* enjoyable to see your favorite cowboy hero do a running pony-express mount or leap a gorge on his "wonder horse." Presumably, Tauntauns are also called upon to perform prodigious feats in their day-to-day usage on the planet Hoth. Why should the audience be denied the joy of seeing this?

What I *did* see was a full-size mechanical Tauntaun trying hard to stand in just the right place so we wouldn't see its supports or control cables, but I *didn't* see the exciting Han Solo action that I *wanted* to see. (Could this "fakey" full-size mechanical Tauntaun be passing the buck to the smooth-striding miniature Tauntaun?)

Later, when Han Solo is searching for Luke, there is an editorial error so bad that it is impossible to tell if we are seeing Han Solo on his Tauntaun in a long shot or if Han Solo is seeing Luke on *his* Tauntaun. Since finding Luke is the point, it's important that this be clear; But it is not.

When a film is temporarily vague, it can be intriguing, but utter confusion on crucial plot points pulls the audience "out" of the film for a moment—makes them lose contact—reduces their appreciation of the sequence. When a



PHOTO: © 1984 JIM DANFORTH
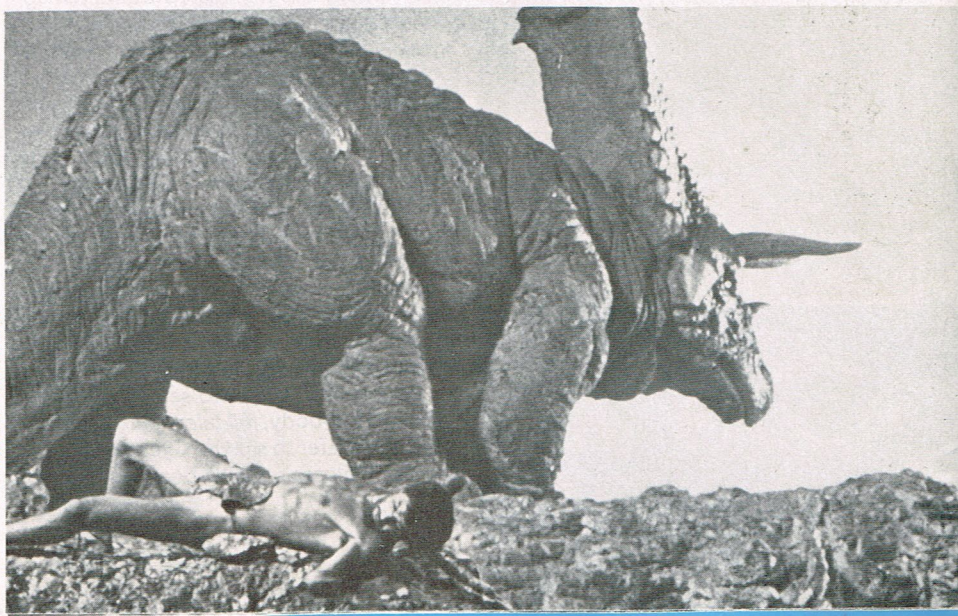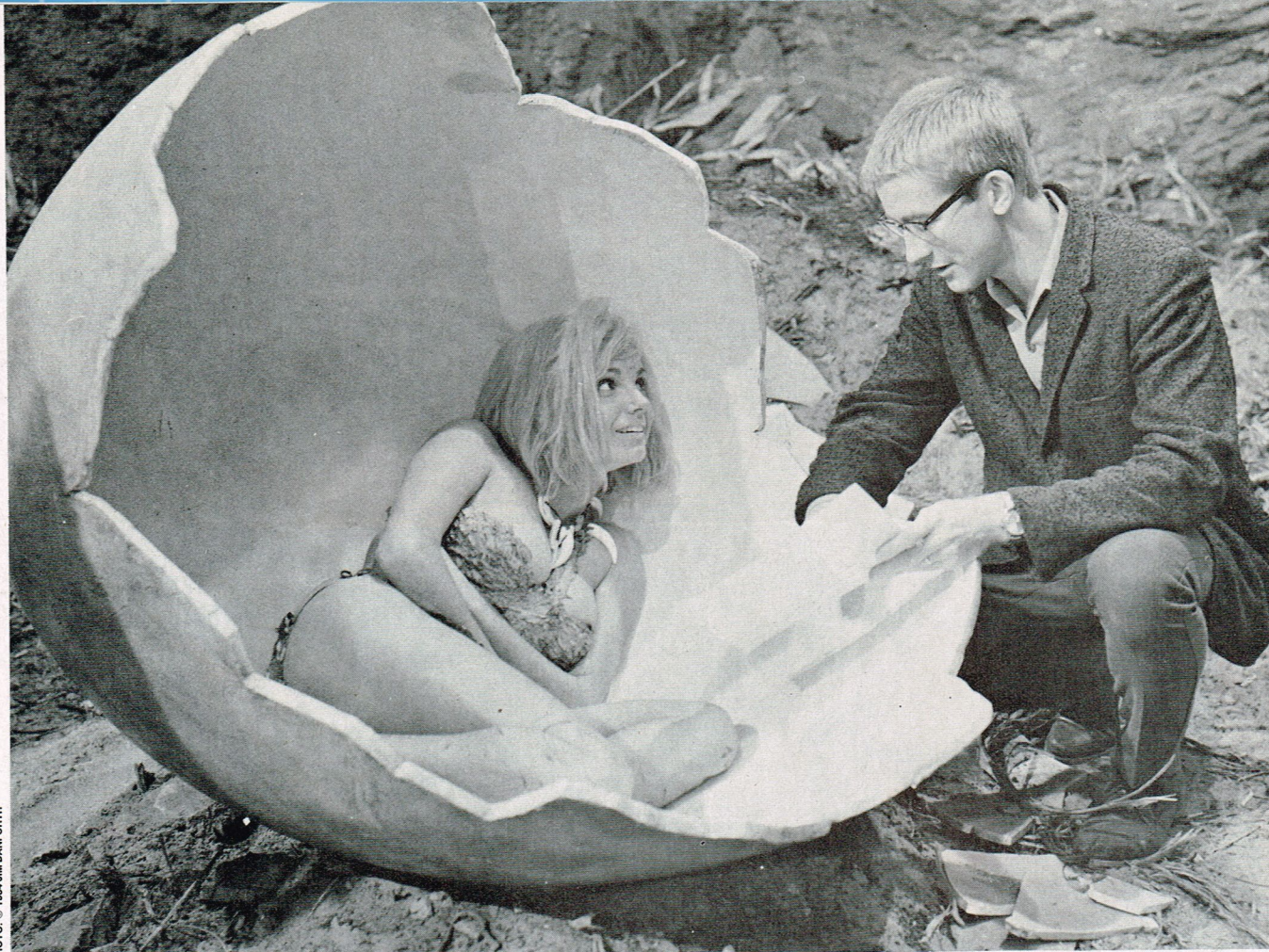
Danforth explains an effect sequence to Victoria Vetri during London filming of *When Dinosaurs Ruled the Earth*.

number of flaws occur in the same sequence, an audience may dislike the sequence without knowing exactly why and may pick what seems to be the most likely cause of its discontent, whether or not it is actually the most important factor. Conversely, if an audience is caught up in the excitement or humor of a film, it will not be excessively critical about the technology.

I contend that if the Tauntaun sequence was not well received, it was because the sequence was poorly conceived, not because the animation as a technique is inadequate.

The audience response to a sequence or a film is the cumulative *subjective* response to *all* elements in that film.

I have frequently heard people say that the animation in the first scenes of *King Kong* is not very good, but that by the end of the film, it had improved. This is *totally* a subjective response. The animation at the end of *King Kong* is the same (or worse) technically as it is in the first few scenes. But by the film's end, the audience was caught up in the story and *character* of Kong. This effect was achieved by exceptionally solid and courageous script construction, direction and by the

cumulative effect of *massive* amounts of animation (*not* by the few, quick cuts currently espoused by some producers as the "remedy" to animation's problems).

While animation today is generally much smoother than that of *Kong*'s time, the construction and direction of many animation-type films falls short of *Kong* even after 50 years of good and bad examples from which to profit.

I would like to repeat my belief that the factors which determine the fate of animation films fall largely outside the area of the animation process.

It is understandable how a dedicated artist like Dennis Muren could be disappointed by what he perceived as an inadequate audience response to his efforts on the Tauntaun sequence, but to draw from this the conclusion that animation is no longer viable seems to me to be an excessively long leap of logic. We need the superb artistry and taste of people like Dennis Muren and Phil Tippett in the animation profession—after all, the Imperial Walker sequence is a masterpiece!

There have always been people over-anxious to proclaim animation's shortcomings or to prophesy its demise.

Some 60 years ago, Willis O'Brien, who initiated the first film version of *The Lost World* and was creating its dinosaur effects, was subjected to the indignity of be-

ing told by the film's writer that she had constructed the screenplay in such a way that if O'Bie's dinosaurs did not work, they could be cut out and the story would still make sense. Today, the writer is virtually forgotten, but O'Bie's dinosaurs are well remembered.

In 1960, I had the pleasure of being associated with the stop-motion animation for *Jack the Giant-Killer*. The effects supervisor on the film had, in his youth, hoped to become the successor to Willis O'Brien, but had allowed circumstances to carry him into other types of effects work. He took great pains to point out to me that I should make the best of *Jack the Giant-Killer* while it lasted, because the film was a freak occurrence and there would never be any more like it for me to work on.

Since that time, there have been 19 or more English-language films made with major stop-motion animation sequences. I ignored my supervisor's rash dictum and have been associated with six of these films and received two Academy Award nominations for my work. The supervisor has yet to work on another stop-motion effects film. His "truth" was true for *him*. I saw a different truth and it has been true for me.

I see animation as a viable technique having enormous entertainment potential. It is very much alive.

**Left:** The chasmosaur from *When Dinosaurs Ruled the Earth*. Actor Robin Hawdon is composited via blue screen matte in front of a miniature set.

# HANSEL & GRETEL

*Myerberg's puppet animated production of the
famous Humperdink opera is unique
in the annals of animation.*

By PAUL MANDELL

**Above:** Director of Photography, Martin Munkasci a fashion still photographer, checks a light level on the set with Gretel and Gingy the Bear.

**Right:** Martin Munkasci prepares to click off another frame. The Acme camera is mounted on a custom designed tracking bed.

Rarely screened and hardly remembered, the 1954 Michael Myerberg production of *Hansel & Gretel* just happened to be the most elaborate stop-motion puppet film ever made. The sets were huge and lavish, the figures were tall, and the armatures were among the most sophisticated ever constructed for a film of this ilk. The fact sheet grows even odder when you consider that the cameraman was a still photographer who had never made a movie before, and the animators were dancers, actors, and marionnette builders who had never animated before!

If this sounds quirky and ostentatious, call it a fair reflection of *Hansel & Gretel*'s producer. Michael Myerberg was a Jewish-European immigrant with a flair for showmanship who sustained a career as a theatrical producer, often taking his shows on the road. At times his reputation would slip when his tour of a successful New York play flopped. Tallulah Bankhead, who appeared in Myerberg's ill-fated tour of *The Skin of our Teeth*, recalled him in her autobiography as "the man who turned a pot of gold into a pot of lead."

Myerberg had other interests, though.

His intrigue with stop-motion puppetry surfaced in 1940, probably as a result of the puppetoons of George Pal, who had recently emigrated from Hungary. Music was another of Myerberg's passions. He became Leopold Stokowski's business manager and was responsible for the conductor's involvement with *Fantasia*. From that point on, he built up a mystique of creative genius that financiers were willing to toy with.

In 1942, Myerberg aspired to produce a feature-length puppet film and approached animator Lou Bunin with the idea of condensing Wagner's 14-hour *The*
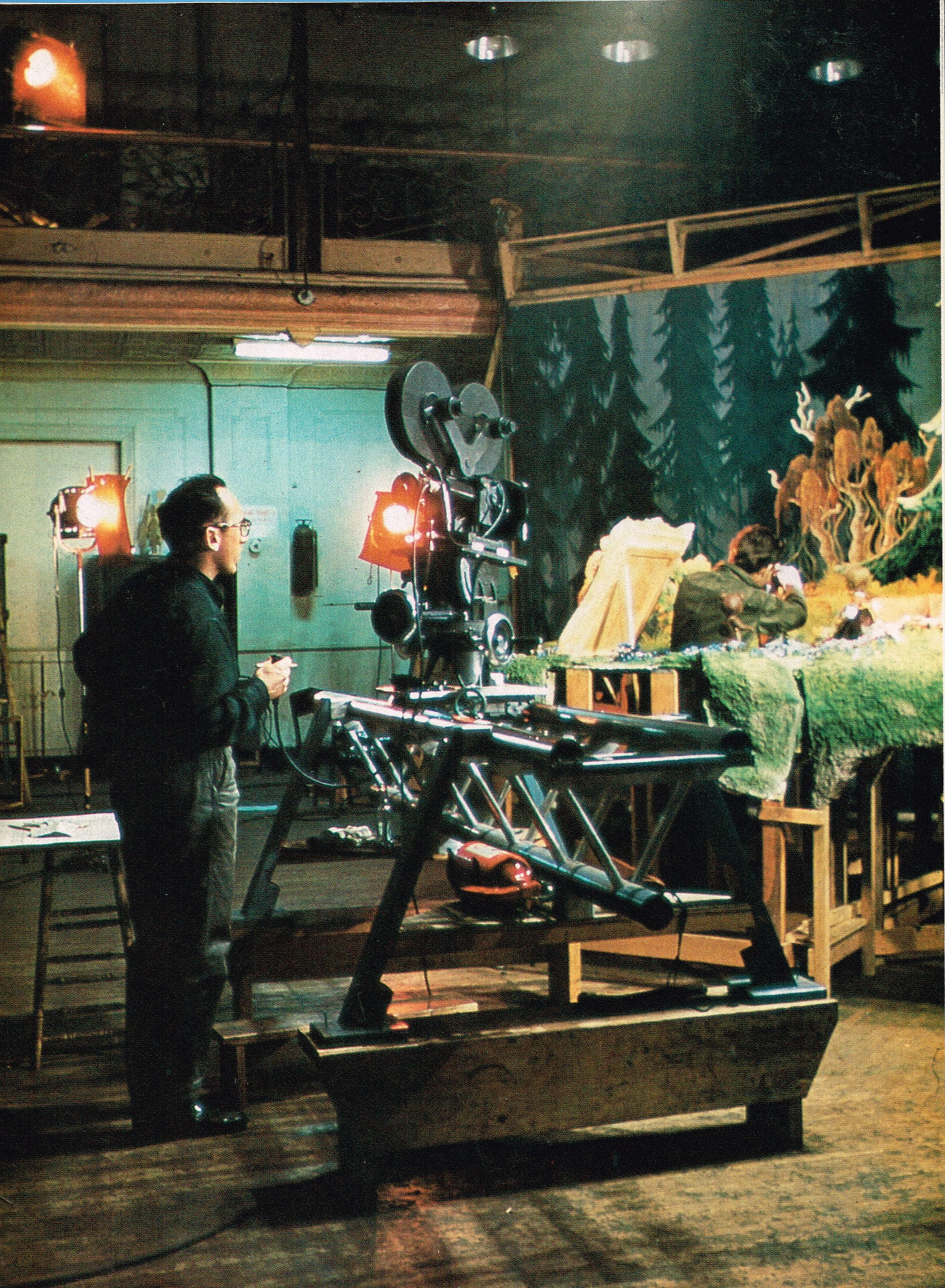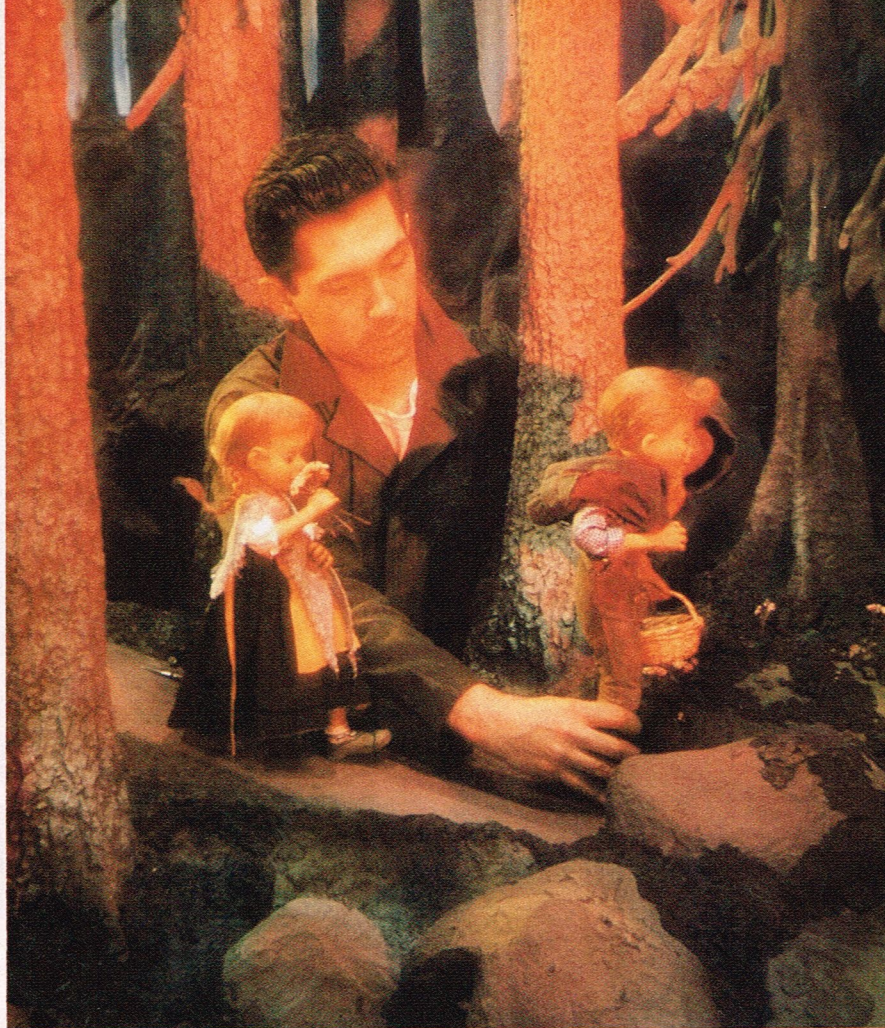
Don Sahlin positions Hansel in the forest set. The end of the eye-positioning tool can be seen just behind Gretel's skirt.

*Nibelungen Ring* into *four hours* of dimensional animation. They worked on it for three years, with Bunin designing the figures and Myerberg developing the music score at a house in Leonia, New Jersey. Then in 1945, as the producer was about to sell his *Ring* to Universal Pictures, a trepidant executive voiced fears over a possible equation of Wagner's music with Hitler's passion for the same. Needless to say, the project was dropped.

Disheartened, Myerberg returned to Broadway and cast his *Ring* idea into the wind. Bunin's puppets were shelved, and the only scene filmed—with the treacherous gnome Alberich and three mermaid-like Rhinemaidens—lay dormant in a film can. When the late forties ushered in a resurgence of puppet films, the stop-motion bug bit Myerberg deeply. His next project, he vowed, would be an extravagant affair starring animated figurines and famous theatrical voices.

The property he chose in 1949 was *Aladdin and the Magic Lamp* at about the time Lou Bunin embarked on the preproduction of *Alice in Wonderland*, and following the release of *Mighty Joe Young*. This time, Myerberg and his associates had developed an armature and the concept of anchoring the puppets to a metal stage via removable magnets. He coined the figures kinemins (a contraction of kinetic and mannequins) and toyed with some hype about "electronic control" to attract backers.

Several *Aladdin* puppets were crafted and costumed. Six months was consumed on storyboards and painted backings. A director named John Paul was assigned. Sets were built and test footage was shot, despite the fact that no script or outline had even been written. Allegedly the project was abandoned when Myerberg decided that *Aladdin* was not the proper vehicle in which to debut his kinemins.

In 1953, he planted his feet in stop-motion turf once more and set his sights on filming Humperdinck's *Hansel & Gretel*. Here was a subject that seemed more appealing to the children's market at which it was aimed.

On the lower East side of New York, in a church-turned-synagogue on East Second Street, Myerberg set up shop. He had chosen the building wisely because it had a very high ceiling and a balcony which traversed the room, giving him a vantage point from which he could survey the various sets. The downstairs area had a fully equipped kitchen and a banquet hall ordinarily used for weddings and bar mitz-vahs. (The pounding on the door by someone wanting to book the hall for a weekend became a common interruption for the night animation shift.)

Myerberg's recruitment of personnel was odd. For his director of photography, he chose the Hungarian still photographer Martin Munkasci, renowned for his fashion portraits of Greta Garbo. Myerberg figured that since stop-motion was actually a series of still frames, a capable **still** photographer would be most appropriate to do the camerawork. The idea was clever, in a way. Unfortunately, Munkasci knew virtually nothing about motion pictures and found the technique of lighting puppets far removed from the world of soft-focus head shots. Luckily, Myerberg had procured an Acme animation camera which was relatively simple to operate. It lessened the burden on Munkasci, who had never before touched a movie camera!

Myerberg was more on the mark when he hired Latvian stage designer Evalds Dajevskis to create the miniature sets. It was Dajevskis who had constructed the sets for *Aladdin* (some out of clear plexiglas, with colored lights playing off the structure), and his credits covered over 200 European productions. Because he had cultivated a sense of storybook imagery, *Hansel & Gretel*'s sets were remarkable, almost Expressionistic in their deliberate use of distortion.

Dajevskis built them out of thick *papier mache*, appliqued paper cutouts, and painted backings. Two carpenters were at his disposal, but since he barely spoke a word of English, he built practically everything himself. The Witch's House, the Hall of the Angels, and Hansel's house were huge breakaways. Trap doors were essential — since the sets were so large, there was no way to get in and animate except from below, a true precursor of the Snow Walker sets used in *The Empire Strikes Back*. (Frequently, a frame was clicked off while someone's head was not fully submerged. Some of this "chatter" was unwisely left in the release prints.) The forest sets accommodated camera tracks, which could be incremented for a dolly effect. Half a year was spent in refining these tracks alone.

Armatures for *Hansel & Gretel* were designed by Peter Ianucci and Herb Schaeffer. Since a total of thirty-five characters had to appear on the screen, activity in the machine shop must have been clamorous. Of course, puppets were undoubtedly stripped once their scenes were done and their interiors reused, especially for something like the "descent of the angels" sequence which required animation of fourteen fully-jointed figures simultaneously!

The design of the armatures was exotic by any standard. Using conventional ball-and-socket joints, tiny built-in levers freed

**Above:** Joe Horstman positions Hansel for another frame.

**Below:** The kinemin puppets in their woodland cottage set.



the tension on the ball, allowing the animator to regulate movement more evenly. Ultimately, this extravagant bit of indulgence was unnecessary, since the quality of the animation left much to be desired.

The puppets' support system was uniqiue. Because many were being used, Myerberg opted to go with magnetic control rather than threaded tie-downs. For the abandoned *Aladdin,* layers of sheet metal lined the stages and the puppets had metal shoes. Beneath the stage, two cylindrical electromagnets caused each puppet to clomp down when the current was on; turning it off allowed the puppet to be disengaged for the next frame. As hairy as it sounds, the system proyed reliable for *Hansel & Gretel,* but there were some unhappy moments. Myerberg had his animators work day and night shifts, which kept activity buzzing for 24 hours around the clock. On one occasion, when the night shift broke for dinner, someone had inadvertently hooked the electromagnets into the main power source. When the switch was pulled, every puppet on stage plopped over and the scene had to be started again from scratch.

The bodies of the *Kinemins* were sculpted in clay by James Summers and cast in foam latex by George Butler. Summers also did the paint job and their "makeup." Again, for his animators, Michael Myerberg's rationale was strange. He thought that *puppeteers* would make better animators than stop-motion people and hired them accordingly.

Don Sahlin, who apprenticed with Rufus Rose on *The Howdy Doody Show*

# Underwater Filmmaking
## Suggestions for the Beginner

*Some notes and suggestions for the adventurous filmmaker, before he gets in over his head.*

By RUSTY PIETRZAK

Wearing a silicone rubber diving mask, Nikki Stonoff holds a Kodak M-2 movie camera in a plastic bag housing. Note the light ripples caused by shooting in direct sunlight.

Unless you and your cast are certified SCUBA divers, restrict your underwater (U/W) filming to shallow water four to five feet deep. You will be able to stand and rest between takes and the only diving equipment you, as the camera operator, will need will be a diving mask, weightbelt and swim fins, depending on the nature of your U/W shots.

Later, I will explain a no-cost technique for getting a "deep sea" look to footage shot in shallow water. And, if you want to get in "over your head," I will tell you how to go about becoming a certified SCUBA diver.

### Holding Your Breath!

When Brooke Shields and Christopher Atkins made *The Blue Lagoon*, noted U/W filmmakers Ron and Valerie Taylor taught them a safe and simple technique for extending the length of time they could stay U/W holding their breath. I have passed this technique along to most of the people I have filmed U/W and you can learn it too.

Just take two very deep breaths, hold the third and submerge. As you submerge, exhale about half your lungful of air to relieve the tension on your chest muscles and lungs. You should be able to stay U/W comfortably for about thirty seconds—long enough for any shot.

**Warning:** Never take more than three breaths before submerging. Taking more than three breaths may postpone your urge to breathe so long that you black out from lack of oxygen before you feel the need for more air!

### U/W Acting

If your characters are amphibious, mermen or mermaids, they will be much more believable if they keep their eyes wide open and do not squint. They should appear relaxed and at home in their U/W environment and keeping their eyes wide open will greatly add to the illusion.

If the roles call for the use of diving masks, use the ones made with silicone rubber. The translucent skirt lets light into the mask and gives the audience a better look at the faces of your cast.

Think of weightbelts as "artificial gravity" devices and you will understand their importance in U/W filming. Weightbelts with five to ten pounds of lead weight will allow you and your cast to kneel or sit on the bottom, giving you steady shots and keeping your cast in place while doing their U/W acting.

### Cameras U/W

Any camera can be put into a waterproof housing and used for U/W filming. Cost will depend on the camera and the type of housing you choose. I will begin with a "home made" housing and go from there.

Take a clear plastic bag, insert your camera and press the bag tightly around the camera. Seal the bag with tape so there is little, if any, air left in the bag. Check the bag for leaks (as you should with any U/W housing) in a sink or tub of

water before going on location.

Double laminated flexible plastic housings are available from EWA-Marine. Two metal rails are screwed together to seal these housings which have glass ports for your camera's lens and viewfinder. These housings come in many shapes and sizes to accommodate still, Super-8 and 16mm cameras. EWA-Marine recently developed a housing for the Sony/Sanyo Betamovie video camera/recorder. Prices for housings for Super-8 cameras start around $100.

Ikelite Underwater Products sells custom made Plexiglas housings for still, movie and video cameras. Knobs and levers provide for operation of the camera controls. Custom made housings for movie cameras are around $150.

The Eumig Nautica is a waterproof Super-8 camera. Great for above water filming as well, it has a single frame mode and is available in 18 and 24 fps models for around $160.

Another way to get U/W sequences in your video productions is to shoot on film U/W and have a film-to-tape transfer made, and edit it together with your above water video. I used this method when I made *Pool Shark* for cable TV.

### U/W Lighting

You will get the best natural U/W lighting between 10 a.m. and 2 p.m. It also helps if there is not much wind and the water's surface is fairly calm.

Filming U/W in direct sunlight will cast ripples of light on your subjects and along the bottom in shallow water. To give your footage that "deep-sea" look, shoot on a bright overcast day or when the sun is behind a thin layer of clouds.

If you must do your U/W filming on a cloudless day, diffuse the sunlight with a scrim of translucent plastic. Without the telltale ripples of light, your shallow water footage will look like it was shot deep on the ocean floor.

Nikki Stonoff demonstrates a revolutionary underwater breathing device called an Agua-Gill, in a test for an upcoming movie from Ark Productions.

### SCUBA Diving

If you are fascinated with the underwater world and want to explore it for a longer period of time than breath holding permits, you might consider becoming a certified SCUBA diver. SCUBA stands for "Self Contained Underwater Breathing Apparatus."

Just look up "diving" in the Yellow Pages for dive shops in your area that give lessons sanctioned by certification agencies such as PADI, NAUI, and the YMCA. You can get basic SCUBA certification for less than $100.

What are you waiting for? Take *your* camera underwater! CM

Your comments and questions are welcome! Write to: Ark Productions 125 Maple Suite C, Centerville, OH 45459

Nikki Stonoff lines up an underwater shot with a Super-8 camera in an EWA-Marine flexible plastic housing.

# Soundtrack Spectacular

**MUTANT**
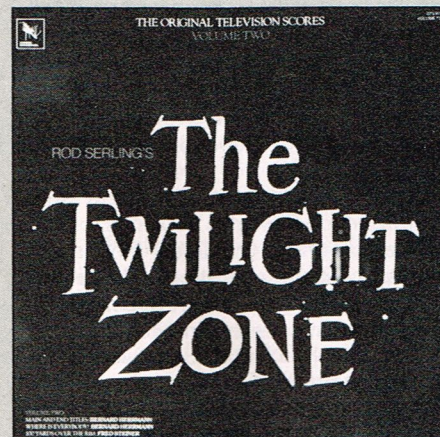London National Symphony conducted by Richard Band plays his score.

**CHILDREN OF THE CORN**
Jonathan Elias's original soundtrack from the Stephen King chiller.

**THE TWILIGHT ZONE**
Original soundtrack music from Rod Serling's classic TV series — released for the first time, complete with extensive notes on the episodes and composers.

**VOLUME I:**
Music by Bernard Herrmann, Franz Waxman, Jerry Goldsmith, Van Cleave (includes Main Title theme by Marius Constant).

**VOLUME II:**
Music by Fred Steiner, Bernard Herrmann, Jerry Goldsmith, Nathan Scott (includes Herrmann's Main & End Title themes).

**VOLUME III:**
Music by Jerry Goldsmith, Bernard Herrmann, Nathan Van Cleave, Leonard Rosenman and Marius Constant's alternate Main & End Title music.

**VOLUME IV:**
Music by Jerry Goldsmith, Fred Steiner, Van Cleave, plus Bernard Herrmann's alternate Main and End Title themes.

**SECRET AGENT FILE**
18 cuts in all! Bond films, "Ace of Spies," "U.N.C.L.E.," "I Spy" & others.

**OUTER SPACE SUITE**
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# Soundtrack Spectacular



**RETURN OF THE JEDI**
John Williams' soundtrack for 3rd in *Star Wars* series.
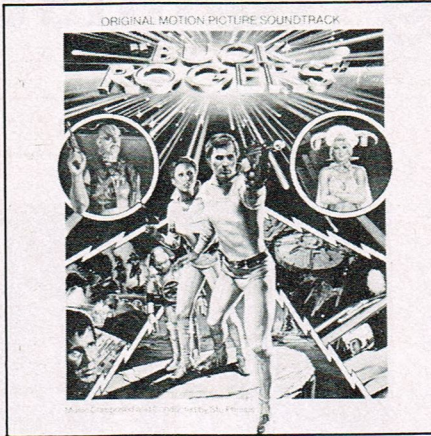


**BUCK ROGERS**
The original motion picture soundtrack, composed and conducted by Stu Phillips.



**FORBIDDEN PLANET**
Original electronic soundtrack music in stereo from the SF classic.
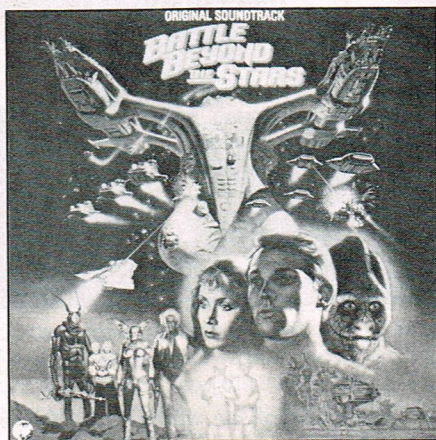


**BATTLE BEYOND THE STARS**
Exciting orchestral score for humorous SF adventure. RARE!



**BRAINSTORM**
London Symphony plays movie score composed by James Horner.
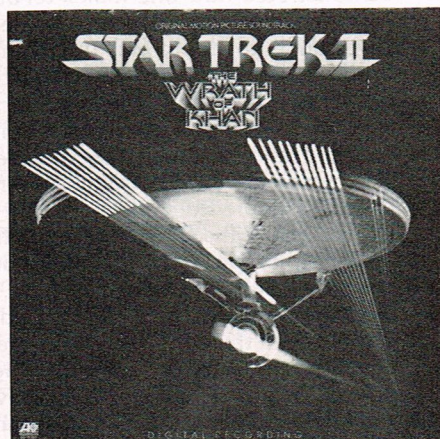


**STAR TREK II: WRATH OF KHAN**
James Horner's score for the popular film. Digital.



**THE ROAD WARRIOR**
The hard-driving sequel to Mad Max with music by Brian May.
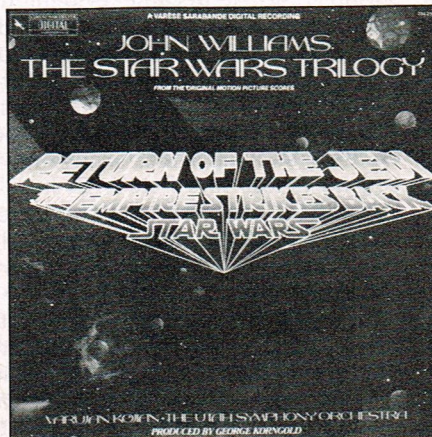


**STAR WARS TRILOGY**
For 1st time: the 3 themes on 1 album! John Williams' masterpiece!
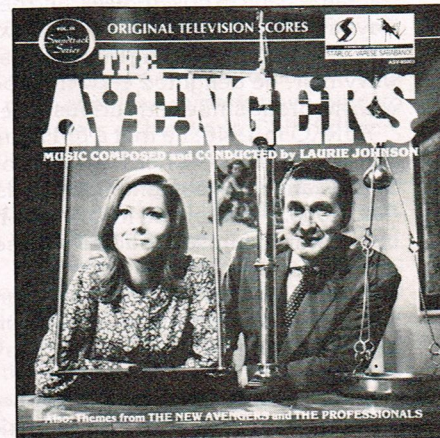


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John Barry's soundtrack score in a digital recording.

# Pete Peterson
# Working Against All Odds

By PAUL MANDELL

Little has been written about him, far less is known about him. He worked side by side with 28-year-old Ray Harryhausen when a certain 12-foot ape held aloft a girl playing "Beautiful Dreamer" on a piano, and functioned as the silent back-up man for Willis O'Brien when the stop-motion maestro was no longer able to animate. The remarkable animation Peterson put on celluloid during an all-too-brief career demonstrated how one man's tenacity prevailed over incredible odds. While it's never quite kosher to play up on an individual's disability, we can't forget that he was a victim of multiple sclerosis, the terrible disease that attacks the spinal cord and renders human muscle useless.

Peterson was born of Danish parents. Details of his pre-Hollywood years are unknown, but Willis O'Brien recalled him speaking of an unhappy childhood, possibly that he had been orphaned. He secured employment at RKO Studios sometime in the early '40s. Unaware of any creative abilities, he lugged light stands and pushed camera dollies, even while the first hint of the disease began to manifest itself. Peterson once told O'Brien that he felt the onset occurring right after his attempts to swim from Catalina Island to Los Angeles, and he always attributed the malady to overexertion. A quiet, unassuming man with dark, wavy hair, he delighted crew members with his broad smile and curious accent.

At RKO in 1946, he met a girl named Jan, whom Willis O'Brien had hired to do Skull Island's cartoon-animated birds in *King Kong*. Peterson fell in love with her but kept it to himself, riddled with self-doubt because of his infirmity. He cultivated an interest in animation and, with a bit of coaching from Jan, did some experimenting with a home movie camera.

When *Mighty Joe Young* evolved, Peterson was assigned to the production as a grip. During a quiet moment, Jan cornered OBie and informed him of Peterson's dabbling in stop-motion. In short order, the two men struck up a friendship. O'Brien was taken by Peterson's attitude and determination to rise above his physical limitations, and promised that he would talk to Merian C. Cooper about turning this grip into an animator. At the time, Ray Harryhausen was the only person turning out acceptable animation for *Joe*; several others
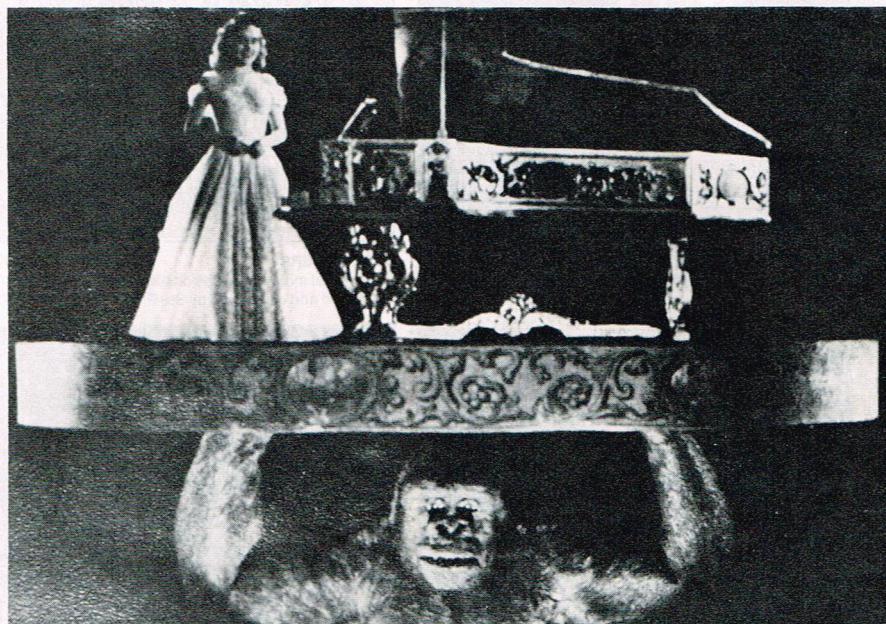


The revolving piano sequence in the nightclub was very tricky—requiring precisely timed moves of the model and the rear-projected background.

had tried it and the results were disastrous. Ray felt that he could probably handle it himself, but by the time the roping sequence was underway in spring 1948, it became evident that another pair of hands would be needed to tackle the awesome animation schedule.

Darlyne O'Brien remembered Peterson well. "He was a very private person and didn't have many outside friends. OBie was *so* sympathetic to anyone who had an illness like Pete's. Even if he hadn't been a good animator, I'm sure that OBie would have put him on the film. As it turned out, he was a *wonderful* animator."

Willis O'Brien gave Peterson one of the four larger Joe models, and he animated it on the back lot as a test. Before doing this, Peterson applied tape strips to a friend's body and had him move about in simian fashion. By studying how the strips moved in relation to each other, Peterson got the hang of it. O'Brien and Cooper approved the test, and Peterson became an assistant animator at $175 a week.

He began by assisting Ray Harryhausen during the roping sequence, animating some horses and a few shots of Joe responding to the cowboy's assault. Peterson also animated the long shot in the tug-of-war sequence using the four-

inch model of Joe, which Marcel Delgado often called his pride and joy.

During Harryhausen's crucial animation of Joe tipping over the lion cage, Peterson was assigned two key sequences—the piano scenes in the nightclub, and the chase with Joe in the getaway truck. O'Brien had a hand in several piano shots, but most of the surviving animation was Peterson's. The medium shots of Joe rotating Terry Moore on the overhead platform were tricky, for they required identically timed moves of the model and rear-projected background. Peterson was particularly proud of the befuddled gorilla's animation as it bobbed its head up and down and grimaced at the stunned audience. Clearly, he had a knack for subtlety as well as frenetic action.

Ray Harryhausen handled most of the scenes of Joe destroying the Golden Safari, but Peterson had a chance to do a few, including the memorable one of an inebriated Joe furiously wrecking the treehouse bridge, the one of Joe jumping off the treehouse, and another of Joe tripping a man as he swung across the nightclub floor.

The truck sequence was all Peterson. Much of it was *schtik* animation, bits of comic business that O'Brien devised during photography. It may have been that

Pete Peterson on the set of *Mighty Joe Young*. The animation of Joe riding on the tail gate is a masterpiece of *schtik* animation.

OBie deliberately delegated these amusing actions to Peterson as a means of raising his spirits, for one leg was already in a brace. Undaunted, Peterson moved right along. During the chase, he had Joe sit in the back of the truck, legs out, spit at the pursuing police car, wipe his lip with a brusque, John Wayne-like flourish, and twiddle his thumbs in boredom. Several actions were complicated, especially the one of the ape arching his body out of the truck in defiance.

As *Joe*'s animation wound down in December '48, Peterson did a few orphanage scenes. In long shot, Joe flips Jill onto his back prior to the tree descent, and several versions of Joe rescuing the baby were done by Pete *and* OBie before Ray Harryhausen's magnificent full shot of the same was approved. Before the wrap, Peterson animated Greg inching down the rope during the holocaust against black velvet, and the animation was put into the scene with a traveling matte. Harryhausen complimented him on the shot. To this day, he remembers it as being "quite good."

After *Mighty Joe Young*, Pete Peterson married Jan and bought an acre of land in Encino, where he began building a house and rebuilding his life. Tragedy struck when Jan had a heart attack and died only three months after their marriage. Peterson was heartbroken. He continued working as a grip until he could no longer handle the strenuous requirements of the job, and began writing stories of his own that would cater to stop-motion effects, to drum up work for himself and O'Brien. Most of it came to naught, but at least the creative juices were flowing.

In 1957, producer Jack Dietz, who had hired Ray Harryhausen to do *The Beast From 20,000 Fathoms*, approached director Gene Lourie with the idea for *The Black Scorpion*. By this time Harryhausen

had formed a partnership with Charles Schneer and they were busy making their own films. So Dietz contacted O'Brien and Peterson, who were working out of Peterson's garage in Encino, and introduced them to Lourie, who was scheduled to direct.

The story was typical of the '50s. When a new volcano erupts in Mexico, a horde of giant scorpions spews forth and raze the countryside. Down in this hell-hole exist not only scorpions, but giant worm-like creatures and monstrous spiders which devour those foolish enough to explore the pit. After destroying a train a la *King Kong*, the scorpions begin to devour themselves. A renegade scorpion escapes and terrorizes Mexico City before being trapped in a bullring—an idea vestigial of OBie's ill-fated *Gwangi*—and done in by the military.

Lourie worked on the preliminary design of the scorpion model and helped design tests with Peter and OBie. When Lourie had a falling out with one of Dietz's associates, he parted company, leaving the stop-motion artists to their own devices. Both left for Teapac Studios in Mexico City where the live action was shot, and an extra's dressing room was remodeled into an animation room. When living conditions there became unbearable, they decided to move the operation back to Peterson's Encino home.

Peterson had lost interest in finishing the home after his wife died and chose to live in a small pre-existing cabin at the rear of the lot. Since the interior of the abandoned house had no obstructing partitions, he and OBie decided to turn it into a studio. The exterior was fashioned from adobe brick and it resembled a prison cell block, but its solidity was more desirable than any cosmetic adornment. O'Brien and Peterson sectioned it off with black drapes, and the effects for

*Black Scorpion* began in earnest. Gone were the days of grandiose Merian Cooper budgets—*Scorpion* was strictly shoestring, and O'Brien was forced to swallow his pride.

Though his leg muscles continued to deteriorate, Peterson ignored his disability and plunged into his work. He had one stop-motion projector which O'Brien had purchased from RKO, (it functioned half the time) and a rack-over Mitchell Standard. Both men worked on the animation models, which combined pieces of casting resin with foam rubber, and armatures similar to the ones Marcel Delgado had tooled for the deleted *King Kong* spider pit sequences.

In this show, Peterson pulled out all the stops and created some of the most frenetic, uninhibited animation ever recorded. Scenes involving five scorpions racing one after the other, enhanced by an animated camera move, point to the marvels of his work. Phil Kellison, renowned commercial effects director who, at the time, had been working as an optical technician at Howard Anderson, recalled such a scene.

"I remember Peterson did one long move following these creatures under a bridge, and his calibrations drifted a bit off. The scorpions all went off to the side of the frame. One of the things I had to do was optically blow the scene up, making it big enough so I could do an 'optical tracking' effect frame by frame on the printer. In doing this, I really began to appreciate the complexity of Peterson's animation and camera moves."

Their next foray became their last feature film. In 1958, Gene Lourie again approached OBie and Peterson with a new monster-on-the-loose bargain basement epic called *Behemoth, The Sea Monster,* which would recycle *The Lost World*'s bronto attack on the London populace (here, a radioactive paleo-
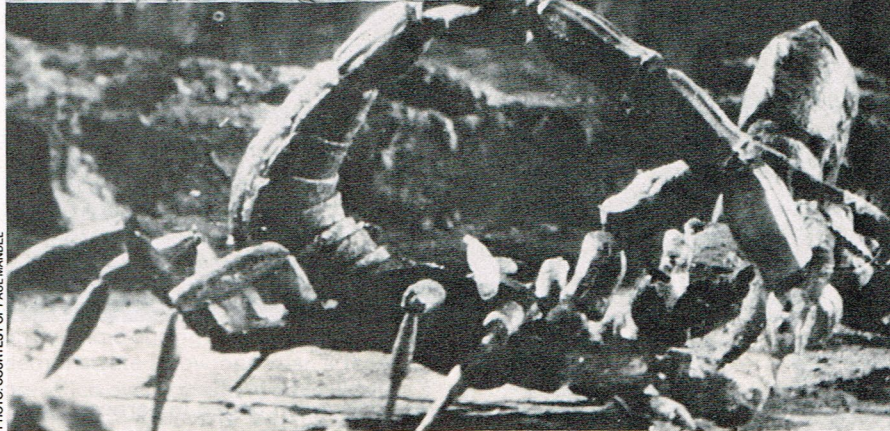
A stop-motion scene from *The Black Scorpion*. Inset: Willis O'Brien and Pete Peterson dining in a Mexican restaurant during *Black Scorpion*.

saurus). Originally the story had no title and no monster—rather, a strange radioactive substance floating on the water. When the Anglo-American production company requested a prehistoric animal, Lourie re-wrote the story and banged it into a shooting script on a two-week notice, with an assist from his blacklisted friend Dan Hyatt. It was Lourie's intention to have O'Brien and Peterson execute *all* the effects, but producer Dave Diamond, fearing the cost overruns inherent in OBie's grand ideas, secretly contracted Jack Rabin to furnish the effects for a fixed price. Rabin, who had an optical printer and a water tank needed for the film—now called *The Giant Behemoth*—sub-contracted Peterson and OBie for the animation. That meant hardly *any* budget to work with.

When Lourie returned with the live-action plates, the creature had already been built at the Encino workshop. As it was with most of O'Brien's creations, the Behemoth was built over disparate armature pieces using Marcel Delgado's build-up technique rather than resorting to a mold. Poor OBie and Peterson were given a deadline of *six weeks* in which to bring in their stop-motion footage. As a result, the composite work suffered, and Rabin was forced to plot, repeat, and disguise certain scenes in order to stretch the soup.

Pete Peterson, by this time, was badly crippled and relied on a wheelchair. Fortunately, his hands remained unaffected, and he had the foresight to build little ramps around the house and oversized handles on all of the doors. The animation stages were built low, about 20 inches off the ground. After O'Brien sketched out key scenes and prepared the setups, Pete would get into position and animate sitting down. But O'Brien's skills were needed elsewhere—the story required the construction of a large Behemoth head to be operated in Rabin's tank for the ferryboat scenes, leaving Peterson alone with the animation chores. A hand switch was undoubtedly at his disposal, but simple procedures like changing the puppet's tie-downs must have been horrendously difficult. Phil Kellison, who visited the studio and built some peripheral *Behemoth* miniatures, witnessed it. "I really didn't know how *badly* crippled he was at the time. I thought he had to animate sitting down only *because* the sets were built so low. As far as I know, he had no other assistant. It must have been enormously difficult for him."

Despite these hardships, the quality of Peterson's animation never faltered. "Feeling" the animal's gait and stride, he gave it a great lumbering walk and graceful neck movements. One can almost sense a shifting of the creature's weight, particularly in the scene of it walking down the pier into the camera lens, and when it careens into high tension wires in silhouette. But the low budget took its toll. Rear projection could only be used for tight shots of its head bobbing up and down the street, and animated action was sectioned off within the live-action plates using area mattes—ironically, the same technique used in O'Brien's silent *The Lost World.*

When time was really tight, Peterson was forced to *slide* the model out of frame, as in the case of the Behemoth exiting behind photo cutouts of the houses of Parliament. Sadly, the power of his animation was diminished by Rabin's optical doctoring, particularly when a shot of the creature's foot trampling a car was reused *three times*, and with a lurid sound effect to boot. That shot alone belied *Behemoth*'s economy, for the foot was actually falling apart when Peterson animated it! Time precluded repairs.

Toward the end of his life, Pete Peterson tried to launch two projects of his own. In *The Las Vegas Monsters*, a baboon returning from space in an experimental rocket was to crash-land outside Vegas and mutate into gigantic proportions, sprouting elephantine protuberances in the process. The puppet was built and a test was shot using a desert setting from *The Black Scorpion*, in which the creature plucks a man out of a cabin and flings him to the ground. A more ambitious color test was done for *The Beetle Men,* Peterson's original (but preposterous) story about a scientist whose attempt to crate a pressure-proof, insect-like shell around an astronaut's body backfires, causing the astronaut and his cronies to mutate into the title characters. Ten duplicates of the puppet—a green comical monstrosity with a cast resin body and sheet lead ears—were animated scrambling over a ridge toward the camera and moving way out of frame. The test footage was screened posthumously in Los Angeles at the Lytton Center for Visual Arts in 1966 for the first time, generating gasps from the audience. Neither project ever got off the ground.

Peterson's tragic life ended in misery. Ironically, after having bravely fought off the debilitating effects of multiple sclerosis for almost two decades, he succumbed to kidney cancer in 1961.

Those who knew him can testify that Pete Peterson was a good-hearted, self-sacrificing man. When the O'Briens moved to the outskirts of Encino in the late '50s, both OBie and Peterson were down on their money. Peterson perhaps even more so. That summer, the San Fernando Valley was like an overheated furnace, something the O'Briens found difficult to tolerate. Snubbing any thoughts of his own physical condition and minimal funds, Peterson rode out to Sears and bought for them a small air conditioner which he managed to install himself.

He was also intensely interested in metaphysics and parapsychology and believed that he had some extrasensory abilities. Lin Dunn, who did optical work on *Mighty Joe Young*, befriended Peterson and talked for hours about metaphysical concepts. Though it has been 35 years since those talks transpired, Dunn's eyes will still light up at the mention of Peterson's name.

Remarked one technician after a screening of *The Giant Behemoth*: "Pete Peterson could actually make you believe that animal was *alive*." A fitting eulogy for a gifted animator. *CM*

# FESTIVAL NEWS

## CINEMAGIC/SVA
## Short Film Search Winners

### Super 8

**First Place:**
"To Cast A Spell"
C. Needham
Ottawa, Ontario

**Second Place:**
"Love Without Respect"
Michael K. Jackson
Union City, CA

**Third Place:**
"Cantankerous Christmas"
Mark Zink
Toledo, OH

**Honorable Mention:**
"Curse of the Cabbage Patch"
Dan Maskara
Yonkers, NY

### 16mm

**First Place:**
"Sandshark"
Edward Halebian
Santa Monica, CA

**Second Place:**
"Your Movie Channel"
Holly Chase
New York, NY

**Third Place:**
"The Invitation"
Nancy C. Morris
Seattle, WA

**Honorable Mention:**
"The Scout"
Robert Zimmerman
Long Island City, NY

### VIDEO

**Winner:**
"Space Movie"
Michael Lennick
Toronto, Ontario

**Honorable Mention:**
"Love Calling"
Jon Mostow
Playa Del Rey, CA



## FOCUS Awards

With more prize recipients than any other school in the nation, New York University's Tisch School of the Arts students swept 8 of 20 awards in this year's FOCUS Film Competition, the nation's largest student competition for 16mm film works. This year's prizes bring to 15 the total won by NYU film students since 1979.

The eight Tisch School of the Arts students whose works were selected from 600 entries nationwide took top prizes in four categories: narrative, screenwriting, documentary and animation.

For the second consecutive year, John Fusco won first prize in the FOCUS screenwriting category. His award-winning screenplay "Crossroads" is about the relationship between an old black "blues" man and a young white boy, and their search for the old man's home. Mr. Fusco is a student in the Dramatic Writing Program.

Alan Kingsberg won first prize in the narrative film category for his film "Minors," a 36-minute color film about a minor league baseball player who develops his curve ball with the aid of a 14-year old girl and makes the major leagues with her help. "Minors" was also given the Dramatic Achievement Award by the Academy of Motion Picture Arts and Sciences 1984 Student Film Competition. A 1984 graduate of the Graduate Film and Television Department, Mr. Kingsberg made the film for his senior thesis.

FOCUS (Films of College and University Students) is the nation's largest student competition for 16mm film works. Each year FOCUS awards over $60,000 in scholarship funds, prize and industry assistance to students who display outstanding achievement in the cinematic arts, and whose films were produced on a non-commercial basis in conjunction with an American educational institution.

The Nissan Motor Corporation U.S.A. which inaugurated FOCUS in 1977-78 remains its principal sponsor. Co-sponsors for the 1984 competition include Steven Spielberg's Amblin Entertainment Inc. (narrative category), Home Box Office (documentary category), Universal Pictures (animation category), 20th Century Fox (screen-writing category), Dolby Laboratories Inc. (Sound Achievement) and Benihana of Tokyo (film editing).

## Ann Arbor 8mm

The 15th Annual Ann Arbor 8mm Film Festival will be held February 6-10, 1985 on the campus of the University of Michigan in Ann Arbor. All amateur Regular 8 and Super 8 films that are silent, have mag stripe, or cassette sound are eligible to enter. Over $2,500 cash and prizes will be awarded this year. In addition, the festival will feature screenings of new Super 8 films from Latin America, Europe, the Mideast, and Australia. We encourage out of town guests to attend the festival. For more information or entry forms, contact the festival. All films will be returned postpaid, first class, insured for $50 unless otherwise instructed. To enter without an entry form, send films in a sturdy container with complete projection instructions, return address, and a check or money order for $8 (US) for films less than 15 minutes long, $15 (US) for films 15 minutes or longer to:

Michael Frierson
Ann Arbor 8mm Film Festival
P.O. BOx 7571
Ann Arbor, Michigan
U.S.A. 48107
phone: 313-769-7787

## World Youth Festival

Kingston, Jamaica plays host to the World Youth Festival of the Arts, April 1-9, 1985. A highlight of the event is the International Film Festival, to be held at theaters throughout Kingston. The Festival showcases feature films, documentaries, children's films and video presentations from around the world. An international panel of film experts will present awards in a variety of categories. For further information on the Festival contact: World Youth Festival of Arts, c/o Jamaica National Organising Committee, P.O. Box 9999, C.S.O., Kingston, Jamaica.

## P.S.A. Competitions

The Photographic Society of America sponsors a number of film festivals and competitions each year. For information about the American International Film Festival, write: Tim Kinnally, 6618 Parkside Drive, Tinley Park, IL 60477. For information regarding the Teenage Film Festival, write: Emil Bilisko, 1508 W. Erie St., Chicago, IL 60622. Please enclose a self-addressed, stamped envelope when you write for information.

**A Man Called Klaw Baker** Science Fiction Drama. Secret Agent Klaw Baker must steal the powerful medallion back for his people. Yet, is this Baker's plan? Will Xevious Blade (hired by his Oneness, the Grand Inquisitor) stop him. Will Baker win at the end and stop the Inquisitor from making a liquid of the medallion—which if consumed would give the drinker immense powers? Could Xevious Blade be *too much* for Klaw Baker in the final battle? Only the fatal blow will tell. Writer/Producer/Director: Klaus Kappner. Cinematographers: Keith Pearson, Klaus Kappner and Tom Regenauer, Cast: Klaus Kappner, Keith Pearson, Doris Kappner, Eric Reubenstahl, Tom Regenauer and Andy Regenauer. A Cascade Films Production. Super-8, color, twin-track sound. Running time: 15-30 minutes. (Cascade Films, c/o Klaus Kappner, 63 Cascade Rd., Warwick, N.Y. 10990)

**Modesty Blaise.** Modesty and her side-kick Willie Garvin travel from Morocco to Hong Kong in search of a 1600-carat diamond which is believed to have been stolen by Omar, the leader of a top Middle-Eastern crime organization. Producer/Director: R. Saba. Original story and script based on Peter O'Donnell's comic strip characters. Cast: Christine Mutschenbacker, Greg Moll, Mike Horaney, Mike Lapkin, Oscar Ereso, Rick Resnick, Diron Ohanian, Dan Harrington, Mike Streff, Mark Fellman, Nick Lucas. and others. Super-8 color to be transferred to videotape, dubbed sound for an "Italian flavor." Running time: 40 minutes. (R. Saba Productions, c/o R. Saba, 3000 Dona Emilia Dr., Studio City, CA 91604)

**Interrupted Journey.** Based on the *Star Wars* saga, this film follows the adventures of Boba Fett after he leaves Bespin with his frozen captive, Han Solo. Producer/Director: Weldon Thomson, Associate Producer/Writer: Ruel Torres Hernandez. FX include: Hyperspace, explosions and lasers. Super-8, color, sound. Running time: approximately 15 minutes. Nearing completion. Weldon Thomson/Megastar Productions, 2614 Gwynne Ave. National City, CA 92050.

**Time Sleeper.** It's 1984 and Sean and Anthony are at home in the evening playing video games. Anthony's father comes in and tells them it's past their bedtime. Sean isn't too happy because every time he sleeps over they have to go to bed early. Before going to bed, they read a book about a man named John W. Terrex. Terrex went into the future via a time machine and was never heard of again. After this, they go to sleep. But when they finally wake up, they find the whole room including themselves covered with cobwebs. Anthony checks his watch and finds out that the time is 7:30, 1996! They go outside and instead of seeing the old neighborhood, they find a nuclear wasted field with a large building in the foreground. While searching, they are captured by two men armed with laser pistols and brought to the leader of the two men. Producer: MGG Studios. Director: Mike Giacchino. Writers: Mike Giacchino and Mike Bryson. Super-8, color, sound. Running time: about 25 minutes. Great fight scenes and special effects. Good suspense. (MGG Studios, c/o Mike Giacchino, 430 South Arthur Drive, Edgewater Park, NJ 08010)

**Condoman.** Ronald, a mild-mannered druggist, is injured in a freak explosion while on a tour of a local contraceptive factory. During the explosion, his body fuses with the latex that is raining down on him. His body's cells absorb and copy the atomic structure of the rubber. Due to the extreme and rapid biochemical change, Ronald is thrown into a coma. After a year of sleep, he awakens, finding himself in a hospital. Unable to pay his bill, he is turned out onto the street. Almost immediately after being discharged, he is arrested for ramming into a woman repeatedly with his head. He has a quick court hearing and is let off with a warning. Ronald quickly has another brush with the law. He is arrested again after trying to climb into a man's wallet at Macy's. The man calls a policeman, mistakenly thinking that Ronald is a pickpocket. He has a return engagement in the slammer. When a judge faces him with the choice of getting a job, or spending six months in jail, Ronald tells him, "I'm flexible!" So, he goes out and gets a job as a Tupperware salesman. It is at one of his parties that he meets Skagg Vermin, a Swedish carnival leader. Vermin, after discovering Ronald's strange pliability, hits him on the head with a mallet and kidnaps him taking him back to Sweden. Vermin places him in his freak show under the title: "Condoman-Man of Rubber." It is here that Ronald is befriended by Mistress Domina, the woman who—in the end—sets him free through her techniques of bondage. Producer/Director/Writer: Dennis Andrews. Cinematography: Rob Davidian. Cast: Robbie Benton as Ronald, Swen Niquisst as Skagg Vermin, and Barbara Seville as Mistress Domina. Pyrotechnic FX: Gary Zeallous. Special Rubber FX: T.D. Boleman. Super-8, color, sound on separate cassette. Running time: 63 minutes & 38 sec. (B.I.M. Pictures, c/o Dennis Andrews, 75-03 254th St., Glen Oaks, NY 11004.)
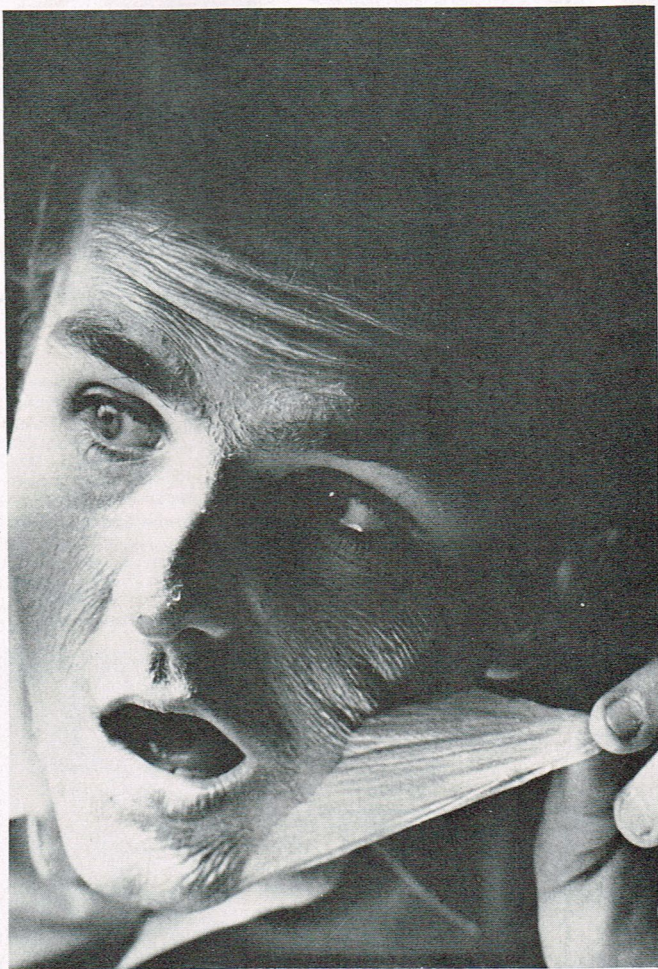
**The Incredible Hulk.** In this adaptation of the comicbook series, David Banner is exposed to a video game gone berserk. The local bullies get a taste of their own medicine when the Hulk shows them the error of their ways. For a climax, the Hulk throws a van through the air. Writer/Director: Donald T. Curran. Camera: Brian Lassiter. FX: Jose Negron. Cast: Miguel Corchado and Freddy Carradero. FX include: stop-motion, animated glass mattes, makeup and miniatures. Super-8 color, musical soundtrack on tape. Running time: 10 minutes. (Ridgewood Spectacular Productions, c/o Donald T. Curran, Ridgewood Jr. High School, 66-56 Forest Ave., Ridgewood, NY 11385)

**Save Planet Terrah.** A sequel to *Planet Terrah.* Terrah, stricken by hunger and under attack by aliens, must be saved. The only ones who can save the planet are two scientists named Lamar and Ray. They fight, with the aid of King Kong and Godzilla, to save their home from the clutches of the dreaded alien threat. Directors: Rick Hunter and Russell Houghston. Producers: Kevin Hunter and Mark Rainey. Writers: Mark Rainey and Alvin Thrust. Super-8. Running time: 16 minutes. (Rick Hunter, 704 Pleasant St., Rockford, IL 61102)

**What About My Heart.** Video of original song. Girl sings of a relationship gone sour while her former lover romances numerous young ladies all around town. Almost one hundred different shots with the extensive use of filters and lighting with some colorization. Broadcast quality video. Running Time: approximately 4 minutes. Stereo recording-courtesy of The Power Station. Producer/Directors: Eric Papalardo and Peter Pollicino. (Brainstorm Video Productions, P.O. Box 281, East Norwich, NY 11732)
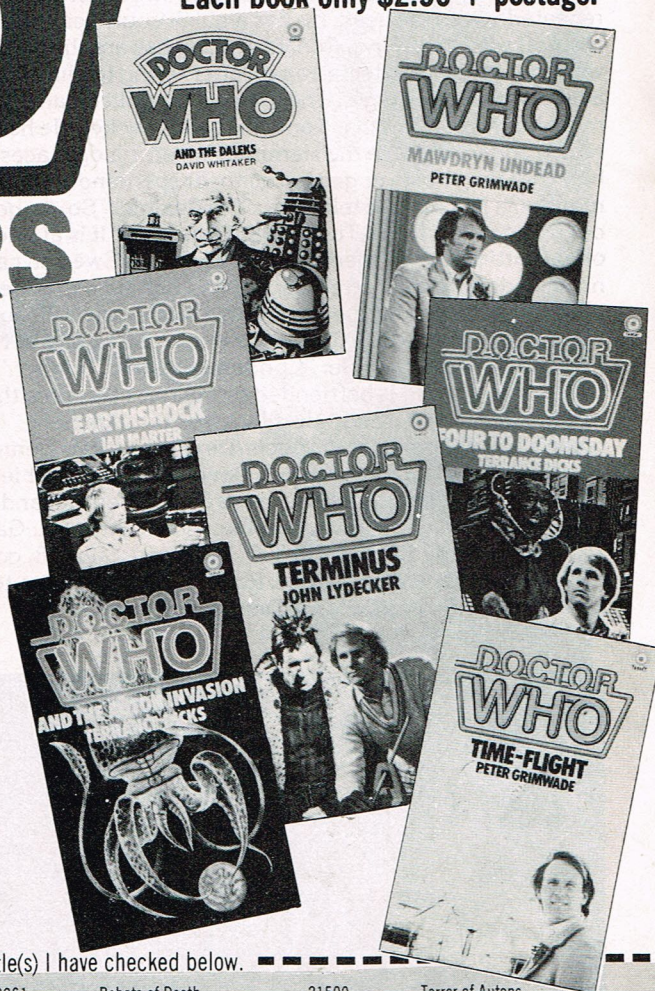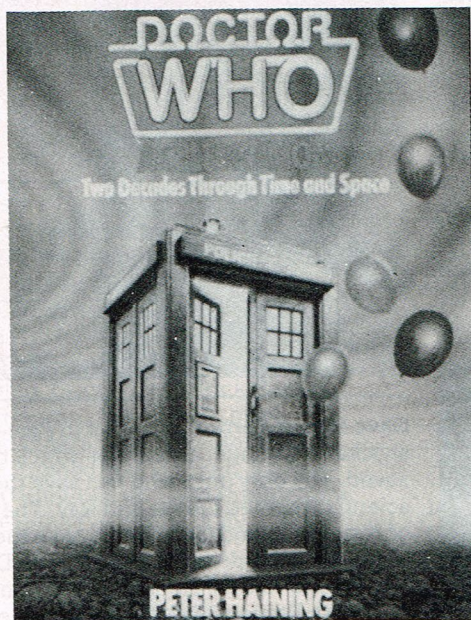
**The Twilight Zone Revisited.** Five tales of the macabre. All stories adapted from Rod Serling's "The Twilight Zone" magazine. In production, for release in November. An Animation Incorporated production. Producer/Director: Keith Sanducci. FX include: electronic effects and animation. Super-8, color, sound. A mixture of live action and animation. Running time: 10-15 minutes. (Animation Incorporated films, c/o Keith Sanducci, 2867 Standish Ave., Anaheim, CA 92806)

# A Mind that's Weak and a Back that's Strong

*Building a headless dummy for a gory-ending scene.*

By KENNETH WALKER

**B**ack in fall '82, several New Jersey independent movie producers and their crews were in the midst of filming a low-budget but technically ambitious paean to their favorite horror films of the '50s, '60s and '70s, entitled *The Deadly Spawn*. The script was in the best tradition of the Hammer and Corman films of the past, full of effects and action sequences to keep audiences glued to their seats.

Although my original involvement with the film was as a soundtrack composer and musician, I was asked to lend a technical helping hand to one of the many effects scenes, by building a special prop. The scripted scene: An actress, cornered, screaming and fighting for her life, gets her head violently ripped off by a gruesome, toothy monster before falling through a second-story glass window to the ground. The required prop: a life-size human dummy with a suitable internal armature, to stand in for the actress during the window falling shots. Specifically, I was to design and build the jointed "skeleton" of the dummy—and do it quickly.

Immediately in my favor was the fact that the sequence was to be photographed from a distance—no close-ups were planned. This allowed somewhat of a relaxation of the technical and photographic demands that would be made on the dummy. Photographing it from afar was a prudent decision on the producers' part, considering the close-to-zero budget allotted for the dummy.

## No Bones About It

My major design chore was to come up with a way of duplicating the joints of a real skeleton, at least in all the most readily apparent places. The most important function of the skeleton was that it be able to assume a "natural" position as it crashed through the window and fell. I had, of course, never seen a headless body crash through a window before, but I had a pretty clear idea of what I did *not* want to



Author Walker and stiff-necked friend enjoy a rare respite and some good reading during a break in construction.

see: arms and legs flailing about at impossible angles, even bending *backward* at the worst times—in short looking like nothing more than an uncontrollable, falling sack of potatoes—hardly a convincing illusion.

After giving the matter some thought, I realized that this *unrestricted movement* is a main cause of the fake appearance of most film dummies. A real skeleton simply does not allow so much movement, and in fact has "stops" that prevent it. (Ever try bending your elbow backward?) I decided to build such stops into my own armature.

There are other aspects of a falling body that can and should be incorporated into a dummy (given the appropriate budget). For example, people as a rule wave their arms in circles as they fall. Although generally ignored, this peculiarity *was* ingeniously incorporated into the *Indiana Jones* bridge-falling dummies—contributing to the fact that they are perhaps the most realistic falling bodies ever committed to film! Alas, my own approach had to be much less sophisticated.

During the initial design phase, I had to figure out where the strong and weak points of the armature would be, and to select materials that would withstand the expected forces. This could be done only up to a point, of course, without massively overbuilding the dummy (the budget simply wouldn't allow it). But the nature of effects filmmaking almost always guarantees that things will not go right on the first take or even the second, so I had to think in terms of materials and design that would stand up to *numerous* trips out a second-floor window.

Wood seemed an adequate, and financially agreeable, material for the bulk of the skeleton, to be reinforced at some of the joints with metal. The wood I chose came from the most diverse and exotic sources—an old broom handle, for example. Other pieces were scavenged from old planks lying in the corner. Generally, if I could find a piece of wood at least half-an-inch thick, I used it.

The dummy needed to be somewhat accurate in size, so the first thing I needed to do was take measurements of the actual actress—height, length of arms and legs, etc. The particular actress not being available that day, I used my girl friend instead, who happened to have about the same build.

The measurements of the shoulder and foot joints needed to be "cheated" somewhat, because once constructed, the dummy would be stuffed and covered with sheets of foam rubber. With the addition of shoes, this would add several inches to its height. The armature was therefore purposely made a bit smaller than the original measurements. (As it turned out, the dummy was still too tall. It was used anyway, and thankfully the editing of the sequence makes the problem largely unnoticeable).



One of the production assistants "lends a hand" for the quick casting of foam hands for the dummy. Here the bottom half of the mold is setting up. The sheen on the skin comes from a liberal coating of Vaseline, used as a mold separator to keep the cured plaster from sticking to the skin.



PHOTOS: KEN WALKER

One of the two completed hand molds is shown separated. Note the round "keys" used to align the two mold halves during the foam casting process. Ken Brilliant assisted John Dods during the molding and casting operations.
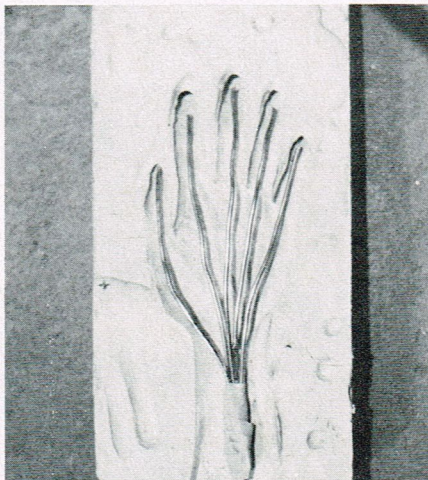


Before foam casting, a "skeleton" of aluminum armature wire is laid into the hand mold. This wire is easily bent yet holds its shape, and is quite durable.



PHOTO: KEN BRILLIANT

Two completed and cured foam rubber hands are pulled from their molds, and await final trimming and painting. R & D foam latex was used.
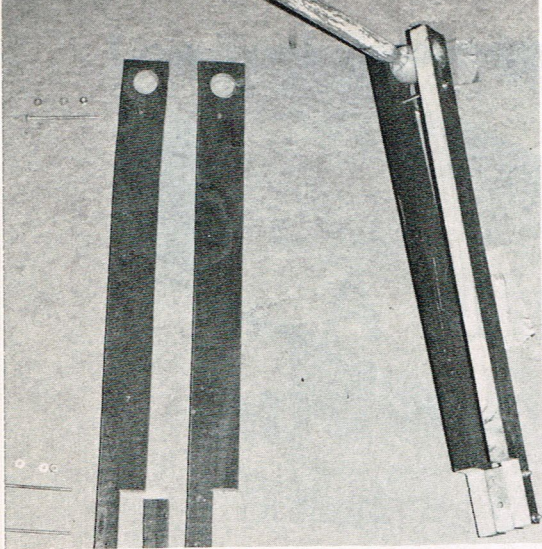
Very few parts are required to make an arm or leg. Note the small wooden spacer block; a ¼'' hole is drilled through it (to accept a ¼-20 bolt) and it becomes an elbow joint or a knee joint, with the rest of the arm or leg pivoting at this point.

The shoulders and hips of the dummy were constructed of ball joints, partly because one of the producers was a stop-motion animator and thought the idea would work, and partly because I wanted to try it. Most importantly, of course, ball joints in these areas would allow the arms and legs to have some realistic mobility.

It's all well and good to want to build a five-foot-tall ball-and-socket armature, but where does one get metal or plastic balls that size? Surprisingly, some stores (including Toys 'R Us) carry a rather strange toy called "Kabangers," two solid plastic balls about an inch and a half in diameter joined with a length of rope. (The object is to swing the balls around by the rope so that they bang into each other. Fun, eh?) The balls are quite hard and sturdy, and happen to have a convenient hole drilled through their centers, perfect for nailing or bolting them to something. Monster builder John Dods just happened to have some of these balls lying around his shop, and they were quickly incorporated into the design.

The ball joints themselves were made quite simply, by drilling large holes through the pieces of wood with an auger-type drilling bit, then hand-carving a slight conical shape into the holes to better grip the plastic balls. This technique worked quite well. A bolt through the two pieces of wood, near the ball, adjusted the tension of the wood "plates."

At the other ends of these arm and leg pieces—that is, at the elbows and knees—each wood "sandwich joint" needed a spacer block to keep the sandwich plates separated.

These spacers served another purpose as well. I decided to use hinges, or pivots, for the elbow and knee joints to give them restricted, one-dimensional movement only. To facilitate this, a ¼-inch hole was drilled through each spacer to create the elbow or knee pivot point itself. The pivot

consisted of nothing more than a ¼-20 threaded bolt and a couple of wide steel fender washers to hold the wood pieces together.

## Fatal Decapitation

For the spine's base, I decided to "get fancy." Since it was deemed unnecessary for the spine to have any twisting motion, I began thinking about the less-involved but still quite fluid motions of a *universal joint.* Found for example in automotive tools, it is a very strong type of joint for transmitting motion, but, by itself, can move in only two directions. It can be likened to two hinges at right angles to each other, as close together as possible. Working out the geometry of this joint was quite a challenging problem, as was cutting the wood pieces to build it. It was a most interesting exercise in three-dimensional logic!

As mentioned earlier, I decided to incorporate "stops" into certain joints of the skeleton, specifically, at the elbows and knees. This I did by attaching a steel mending plate along the *back* of a particular joint. This mending plate was attached to only the *upper* of the two "bones" making up an entire arm, for example; but the plate *overlapped* the joint itself, so that the wood of the *lower* arm section (the one attached to the hand) would come to rest against the plate as the arm straightened out. Thus, the arm was prevented from bending backwards at the elbow.

Simple hand and foot pieces, again made of wood and without finger or toe extensions, completed the armature. With the joints properly tensioned, the skeleton could more or less hold its position, although this was not called for in the script.
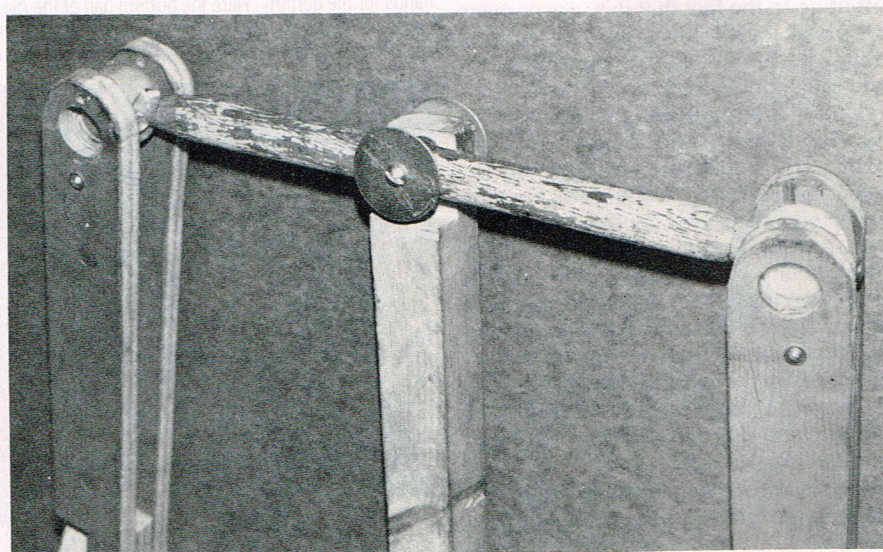


This close-up of the shoulder area illustrated the simple construction techniques used. The ball sockets are straight holes drilled through the wood; the plastic balls are nailed onto the piece of wooden broom handle. The shoulders pivot up and down where they join the top of the "spine."
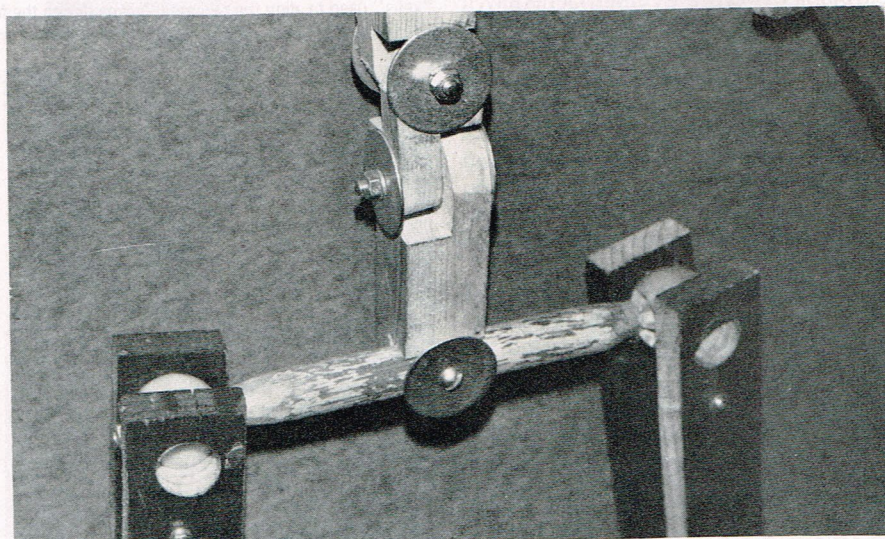


The wooden universal joint can be seen in this closeup of the pelvis and hip area, as can the extra lower pivot between the two hip ball joints. The socket tension adjustment bolts are clearly visible below the holes.

Foam sheeting and newspapers, taped into place, were used to flesh out the dummy to the proper dimensions, and the clothes and shoes worn by the original actress were used to cover it.

The joints of the finished armature needed to be quite loose, to allow the thickly padded and clothed dummy to move and bend properly. Unfortunately, these stuffing materials presented so much resistance to any movement of the joints that foam had to be cut away from them later to allow the dummy to move at all!

Our creation still had to have realistic hands, *and* a gaping, ragged neck piece to simulate the result of its head being wrenched off. The hand work fell to John Dods and Ken Brilliant.

A willing production assistant sat for the molding of the hands. Ken used these two-piece plaster molds to produce quick foam rubber castings, which were then trimmed and painted. Aluminum armature wire inside gave them some support and allowed them to be bent into any grotesque angles the producers might want.

The foam hands were simply taped over the wooden hand joints that I had built, and the dummy's blouse pulled over it all to hide the seams.

The ripped-up neck piece was a slip-cast latex rubber appliance, made by the film's effects makeup man, Arnold Gargiulo from a mold of his clay sculpture. This gory facsimile was painted in appropriately disgusting colors and taped to the top of the wooden skeleton.

Once the blouse was buttoned over this appliance, the illusion was complete. Decidedly low-tech, it had taken barely a day to make. Some wood and rubber had become a poor, frightened girl who had met her maker at the hands-and-teeth-of a ravening monster.

## Window Smashing Action

The fateful day finally arrived to film our lovingly prepared dummy in action, as it sailed through a real second-story window. All our work had led up to this moment.

First came the preparations. A suitable window of the location house was chosen. Cameras were set up. Blood was squirted on the dummy in all the appropriate places. The director took his position. Tim Hildebrandt (the film's poster artist and miniature background painter) and I, in our capacities as official "dummy wranglers," would enjoy the ultimate moment of personally tossing the dummy out the window. Legs firmly planted, we positioned both ourselves and the dummy, awaiting our cue. The camera's view from the outside mandated that we be as far back from the window as possible, so as not to be seen. The dummy itself had to be held in its proper orientation to crash, backwards and upright, through the window.

All was ready. Finally came the signal for "Action!" The two excited, able-bodied dummy wranglers counted to three and, with a not-too-subtle toss, threw the dummy squarely at the large pane of glass. To our incredulous surprise, the dummy bounced off the window, back into the room. Fake blood was splattered everywhere. Upon recovering from the entire crew's hysterical fit of laughter following this first botched take, Tim and I picked up the body, repositioned all the joints; wiped the window pane clean, and again waited for the director's signal.

Action! This time the dummy was thrown with a good deal more force. It crashed through the window exactly as planned, got hung up on the shards of glass and the windowpane momentarily, then plummeted to the ground in a gory
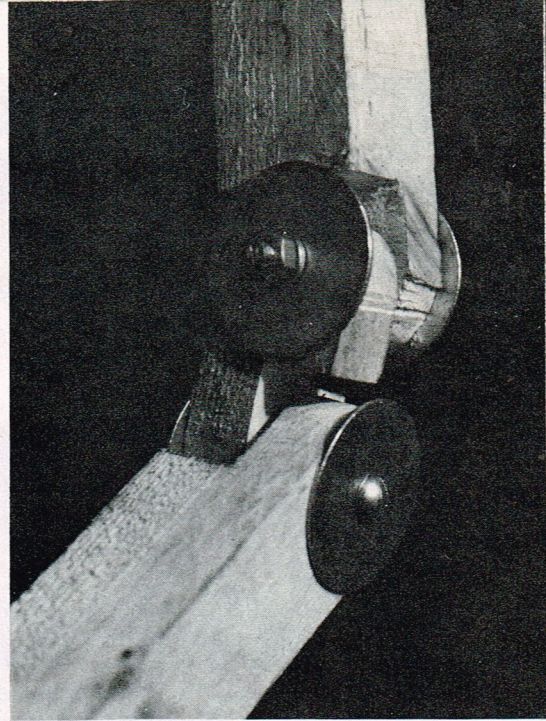


A carved wooden "universal joint" was used in the lower back of the dummy, to allow front-to-back and side-to-side movement of the upper torso. Twisting motion was deemed unnecessary.

heap. The action was deemed satisfactory (*we* thought it was *great*), but all concerned decided to do it "just once more."

By this time the dummy was beginning to look like it had been run over by a freight train—arms and legs were twisted in all the wrong directions, the clothing was just about covered in Karo syrup blood, etc. My wooden armature, designed and built with such flair and panache, had begun to show the strain of being violently smashed up against things. I had a gut feeling that this last take would be the one to finally do it in.

We dummy wranglers decided to give our charge a really grand send-off this time. First, a new window was installed. Then, at the signal, with all our might, we *launched* the dummy at the pane of glass. An appropriate choice of words, as the dummy became like a human missile once it left our hands. To everyone's amusement, it literally *rocketed* through the window amidst a shower of glass, described the perfect arc of a projectile through space, and landed at least several yards past its prescribed landing point— and out of camera view entirely.

Needless to say, everyone agreed that the previous take was more in keeping with the serious nature of the sequence. Pity the poor dummy, though! It was, after three smashups, amazingly still intact, though most of its joints were being held together solely by the strength of the tattered clothing. An ignominious end, but it had done its job.

As several of us unceremoniously cannibalized the now-wrecked dummy for what metal parts we could, we felt a satisfaction that, given the proper circumstances, low-tech can *really* work! CM
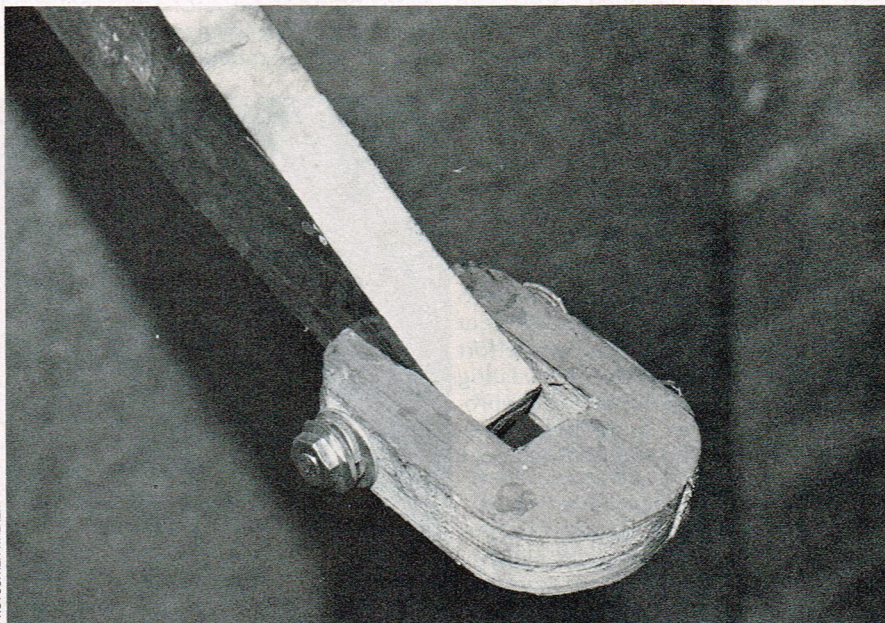
The hand is a simple hinged piece of wood, without finger extensions.

# Finding Actors with "The Right Stuff"

*Proper casting is one of the most crucial aspects of making a successful film.*
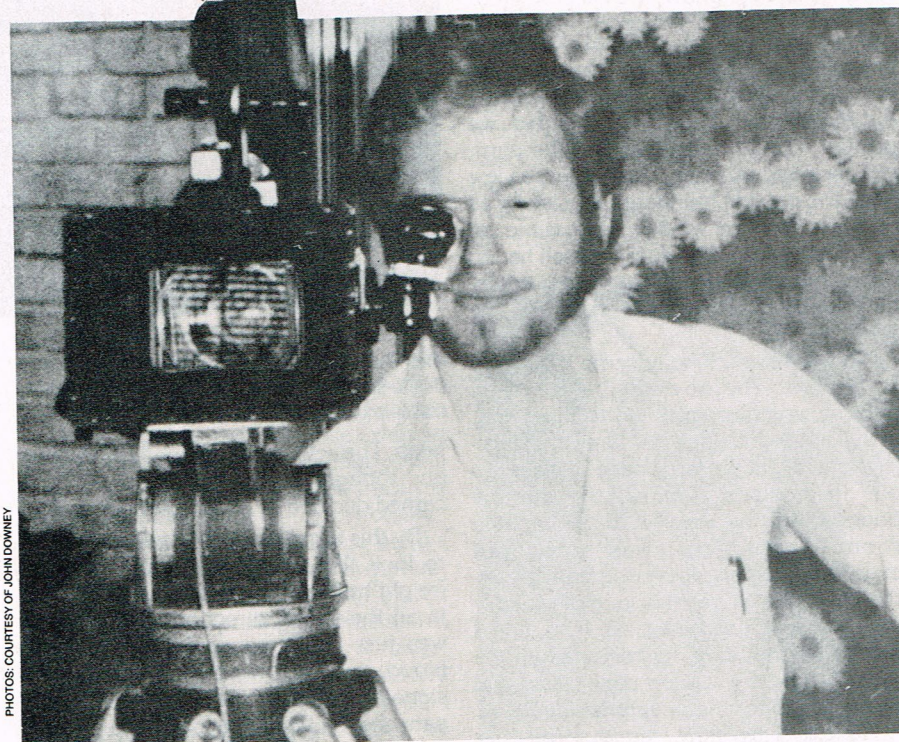
### By JOHN DOWNEY

Director John Downey lines up a shot on his first feature, *Summer At Seventeen.*

**W**hen I began planning on my first low-budget feature, *Summer At Seventeen,* I first analyzed the limitations of this kind of project. Recognizing that my budget would not allow great production values, fancy effects or a John Williams score, I tried to concentrate on the things that *were* within the scope of this film and I wanted to avoid what I regard as one of the major liabilities of most college projects, amateur shorts and low-budget films: *bad casting!* This is something that can be done properly without a great deal of money—unless of course your script simply *demands* that a well-known star play the lead.

Steven Spielberg once said in an *American Cinematographer* interview that forty percent of his creative effort was finished on a film when he completed the casting. Forty percent! George Lucas exhibited tremendous stamina and patience by personally seeing thousands of actors to cast the parts in *American Graffiti.* The effort paid off: the cast list of the film reads like a "Who's Who" of talented and established film and television actors of the 70s and 80s. And back in the 30s, David O. Selznick did *not* spend two years trying to cast the Scarlett O'Hara part in *Gone with the Wind* because he couldn't find an actress who was interested. He knew, as do today's best filmmakers, that casting is crucial to the success of a film because the actors a filmmaker chooses ultimately determine an audience's perception of story, characters and their believability, in short, whether or not the film "works."

I think most young filmmakers are so enamored of the technical aspects of film that they neglect casting, giving parts to people who are "handy" or "sort of" right for the part. As much time and effort should be devoted to the proper casting of a film as any other aspect of preproduction. (Yes, even more than storyboards! They're fun but the audience never sees 'em!)

### A Few Rules

Before giving my advice on how to go about casting a film, I would make one comment to amateur filmmakers: *don't write a script you know you can't cast believably.* Do not write a script that calls for a ninety-year-old man and an eight-year-old Japanese girl who speaks fluent Spanish unless you have a pretty good idea of where you can find these people. Do not have teenagers play adults—it just doesn't work. These mistakes diminish the audience's enjoyment of your film and make your film look amateurish.

Say your Super-8 or 16mm film is something along the lines of *Star Trek.* Instead of having your 17-year-old friend play 40-year-old Captain Kirk, perhaps you could modify your story so that it takes place when Kirk is seventeen. Try anything, but remember: it is difficult enough to get the audience to suspend disbelief without making it even more difficult with unbelievable casting. On amateur projects, part of the casting considerations *must* be the selection of story and subject matter.

Assuming your script is written, and you are reasonably sure you can cast the parts, it is time to start casting. First, list all of your characters and not *just* the physical type, but also an acceptable age range, hair color, the level of acting ability the part is going to require and any special physical skills required.

### A Case in Point

I can testify to the problems involved with finding an actor for a part requiring special athletic/physical skills. I naively wrote my screenplay including an

18-year-old male lead who is an accomplished gymnast who performs all six gymnastics events. When it came time to cast the part I made some interesting and frightening discoveries.

There were thousands of female gymnasts in my city, but less than fifty male gymnasts in the right age range! Out of those, virtually none had any acting experience. Very few had the "look" I had in mind. To make matters worse, this was, remember, the *lead role* of the film!

The person chosen would have to carry the film throughout. I tried other routes. I thought of hiring an actor who was athletic, then training him to be a gymnast. But a gymnastics coach informed me it would take years for someone to reach the skill level required for the part.

A stunt double for the gymnastics simply would not work. The film was too small and personal to resort to standard movie trickery. The film needed the credibility of the audience *knowing* the actor in the role was actually doing his gymnastics.

It was scary, but I ultimately found an excellent gymnast at Houston Baptist University, Kyle Brown, who not only handled the lead role with confidence and subtlety, but whose superb gymnastics gave the film a lot of believability. Moral: know what you need to have your actors do, make sure they can do it well, and that they can do it *safely!*

### Cattle Calls

Be thorough when it's time to start looking for actors and do not use friends and relatives because they are close by. Begin by trying local high school and college drama departments. Talk to the teachers. Call your local casting agents and let them know your needs. See local plays and talk to your fellow filmmakers in your area for ideas on actors. Make it known what type of film you are doing,

Actor Kyle Brown and director John Downey discuss a scene during filming of *Summer At Seventeen.*

Adam Williams and Kyle Harrison play characters who are constantly distracted from achieving their goals during the summer after high school graduation.

and what the needs of the film are. Only use friends and relatives if they are the *best* choices for the roles.

See as many actors as possible for each part. Explore *all* of the possibilities! While it is important to know what you want, be open minded to fresh interpretations of a role. Wait until you have seen just about everyone you think you can consider before you make a decision on a part. You don't want to give a role to someone and then have another actor audition the next day who is 100 times better. Be patient.

Keep in mind that a lot of actors are nervous during auditions, be polite and professional and try to make a determination as to what it would be like to work with the person in a high-pressure shooting situation. Try to determine the person's dependability. If they can't show up on time for an interview/audition, will they be punctual on a shooting day? Probably not.

Given that a person is physically correct for a part, the next factor I look for is whether or not that person's basic personality fits the part. Each person you place on-screen brings with them their looks, their experience, their voice—that person's "essence" makes a statement in your film. It's essential that your actor's "essence" be in sync with your concept of the part. And again, the closer the actor as a person is to the character in the script, the greater the film's believability on the screen.

If it is possible, video-tape or film your final choices for a part. Some actors project better through a camera than they do right in front of you! It's something indefinable. Stage actors, who are used to performing for the back of the theater need to "tone it down" for film and this also will be useful in determining whether or not

they can adapt to the filmmaking process. Pick key scenes from your script for video-taping or filming. If the actor can handle the tough ones, the easy ones will not be a problem.

### Call Backs

In making casting decisions, try to imagine the actors you are choosing for the parts interacting. Is there chemistry at work? If two people are supposed to be friends, does it "click?" If an adult is supposed to be someone's parent, is there a resemblance? The point here is that not only must your individual choices be correct, your choices must make for cohesive, believable relationships as a whole.

Once you make your casting decisions, have second and third choices in mind for every part. I have twice hired actors who, due to circumstances beyond their control, were unable to work on my film. One had to leave town to accept a scholarship at the N.Y.U. Drama Department! So have back-ups in mind.

On professionalism (even for amateurs): always be straightforward and honest about what a role entails, what you can pay, when you will pay, (whether there is pay!) and when the actor will be needed for work. Word will definitely get around to other actors if you treat people badly.

The benefits of making intelligent, creative and "correct" casting decisions will be all over the screen from the beginning of your film to the end. Proper casting can contribute immeasurably to the quality of your film. An audience relates to *people* above any other aspect of your film—so make sure you put the right people on the screen! If you follow these simple guidelines for casting, your next film will undoubtedly be more believable—and entertaining!

# The Great American Action Scene

## How to Choreograph Fight Scenes For Fun & Profit

### By BOB GRIFFITH

Errol Flynn and Basil Rathbone engage in a dynamic, breathtaking sword fight. John Wayne pulls his fist back about a half mile and then delivers a punch which sends his adversary through a bar room window. While chasing some criminals, Steve McQueen turns the streets of San Francisco into a motor-speedway. Bruce Lee demolishes numerous opponents with perfect martial arts techniques. Indiana Jones successfully defends himself against a horde of deadly assassins, while Luke Skywalker battles the infamous Darth Vader in a life-and-death lightsaber duel! Do some of these scenes sound familiar?

From the beginning of the cinema, some of the most memorable scenes in motion picture history have been the action scenes. This does not at all mean that the action scenes are the most important aspect of films. There have been many great movies that contained little or no action at all. But in an action-oriented film the caliber of the action may mean the difference between a lackluster, mediocre movie or a fast-paced, dynamic movie which may lure the audience back to see the film again and again. Imagine films like *Raiders of the Lost Ark* and the *Star Wars* saga if the action sequences had

Some areas of the body—such as the back, stomach and chest—can tolerate a certain amount of contact in order to make the technique look real.



been done poorly.

When I speak of "action" I do not just simply refer to fight sequences. Action can also be a chase scene, an epic sea battle or even a football game. I define action in film as the following: *Action is the result of events which cause two or more characters to physically confront or attempt to confront each other.* This can be interpreted in an infinite number of ways, because the possibilities for an action scene are endless.

The key word for creating successful action scenes is *research*. Watch as many action packed movies as you can. Here is a list of some movies I think contain some excellent action sequences: *The Mark of Zorro*; *Gunga Din*; *The Adventures of Robin Hood*; *The Three Musketeers* (with Gene Kelly); *The Quiet Man*; *The Magnificent Seven*; *In Like Flint*; *You Only Live Twice*; *Enter the Dragon*; *Hard Times*; the *Rocky* films; *The Warriors*; *Bullett*; *The Battle of The Bulge*; *Raiders of The Lost Ark*; *Conan The Barbarian*; *The Road Warrior*; and the *Star Wars* saga.

These films are just the tip of the iceberg, but I feel that they represent a wide cross-section of the various aspects of action in film. Study these films and others like them. I have a wide variety of video tapes at hand and have even assembled some "action" tapes, which are video tapes that contain nothing but action sequences from films so that I can watch, learn and compare.

When watching the "action" there are things to note: study how the action flows, and how it is shot. Study how the scene is paced and edited, and how it fits into the mold of the story. Is the action fast-paced or dragged out? Is it necessary to the story or just gratuitous? Notice the choreography of the movements. Are they fluid and pleasing to the eye or are they jerky and amateurish? Look at the actors involved; are they right for the role? Do they look competent doing the action or are they miscast because they lack the training necessary to perform the action convincingly? Compare films that have exciting action scenes to those which contain inferior, poorly-choreographed action sequences. The comparison in many cases is laughable. Remember the exploitation films of the early 70's, in which one man with a gun slaughters the equivalent of a battalion of armed men? Or those

great chop suey, kung fu flicks made on the budget equal to that of a 12 year old's allowance? Research, study and compare.

### Fighting Mad

A fight scene can consist of hand-to-hand combat, a gun fight, a sword fight, an aerial dog fight or any other physical confrontation between two or more characters. However easy it may seem, staging a fight is no easy endeavor. There are a wide variety of elements which come into play.

**Step One:** Familiarize yourself totally with the script. Get to know the characters involved in the fight sequence. Determine what sort of action is called for. Remember that the way the actors fight has to be consistant with the characters they are playing. For instance, a knight would not use a shot gun, and a cowboy would not use karate (except maybe in a comedy).

Research also means learning a bit of history. If you were doing a film about ancient Rome, the War of 1812, or Vietnam, you had better extensively research the time period involved. Learn about the weapons of that time period and how these weapons were used in combat. You might want to consult a historian or weapons expert as a technical advisor to help you achieve the greatest possible accuracy.

Here are some general rules to follow when choreographing fight sequences from various time periods (But keep in mind the many variables and the characters involved).

*Ancient Civilizations*—(Greek, Roman, etc.) There would be heavy emphasis on the sword, the lance, the axe and the bow and arrow. Hand-to-hand combat would be used in remote circumstances and would encompass grappling and throws, but little to no punches at all.

*Knights*—Again there would be emphasis on weaponry: the great sword, the bastard sword, mace, battle axe, lance, etc. There would also be little or no emphasis on hand-to-hand combat due to the use of bulky armor. [See CINEMAGIC #25 for Ron Miller's tips on creating suits of armor.]

*Westerns*—Westerns usually employ gunfights and in terms of fist fights the moves should be as simplistic as possible. The fight would employ wild swings,
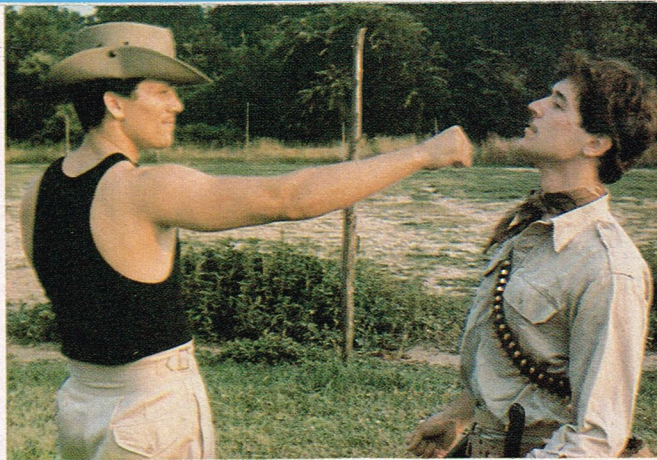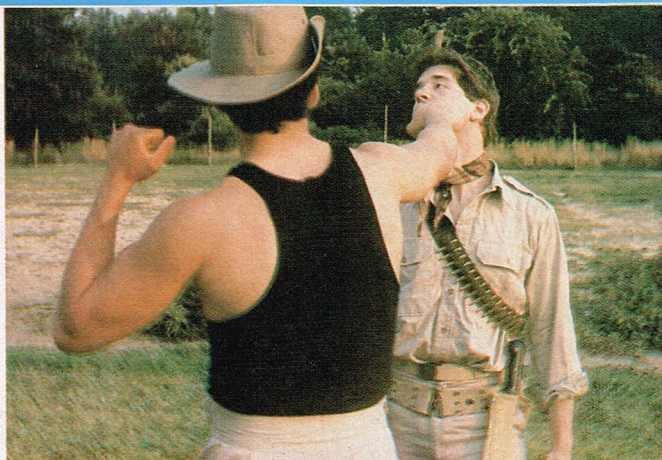
As with the kick, you can see what the effect of the punch from the right angle looks like as well as the clear miss from another angle.
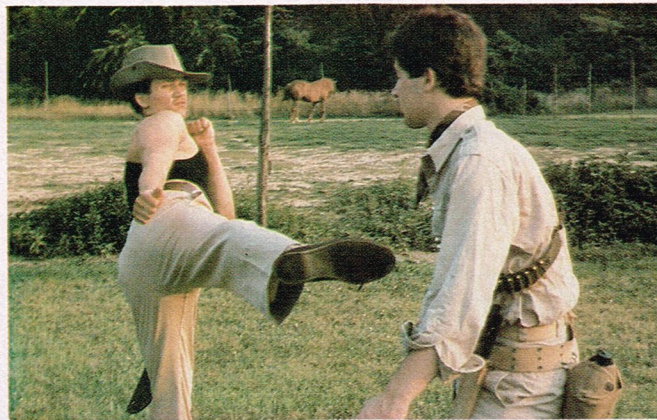


Stunt man George LeVigne takes a realistic kick to the stomach. From this angle you can see that the kick never really hits George.



This punch—which misses from this angle—looks like a hit from another.

telegraphed blows and a considerable amount of broken bottles and furniture. Since most people in the wild west were not trained boxers or martial arts masters, there should be little emphasis on technique. Keep it wild, please! The Indians on the other hand, because they were trained from childhood in the warrior ways, would heavily emphasize the use of the lance, bow, tomahawk and the knife as well as some barehand techniques.

*Modern Day*—A modern day movie would present many possibilities, but remember it all depends on the character involved. How would he fight? Is he a boxer or ex-boxer? Did he ever study martial arts? If so, what style did he study? Maybe the character does not know a great deal about fighting at all. Maybe the character has a military background and

would employ hand-to-hand combat techniques. In a modern day film you would probably have the widest range of fighting techniques to use, but always keep in character.

*Future Tales*—In futuristic movies, martial arts would seem to be the norm. Consider an advanced age. Most futuristic settings contain advanced technology. It would only follow that people would be trained to fight in a more sophisticated way. Consider *Star Trek*, *Buck Rogers* and the likes. Their fight scenes contained a wide variety of sophisticated hand-to-hand maneuvers and everyone seems to know them!

*War Movies*—Remember the older the war the less sophisticated the way of combat, whether it be weapons, or hand-to-hand fighting. For instance, modern

armies would employ modern weapons and would be trained in the martial arts, whereas a World War II soldier would be trained with less sophisticated weapons and with limited wrestling, boxing and judo techniques.

*Espionage*—Spies almost always employ martial arts techniques when not using weapons (silencers, poisons, knives, etc.). (Remember: these are just some general rules, subject to change, depending on the variables of story).

**Step Two:** Now that your research is complete, choreograph your fight on paper and use detailed storyboards. Go through the movements with your actors and see which moves do or do not work. What looks dynamic and what looks corny. Also, never instruct somebody on how

# Bringing the Dead to Life

*Animator Peter Wallach found that although he had a great time creating the stop-motion effects for the latest Jacksons video, the four-day shooting schedule was "torture."*

By JOHN CLAYTON
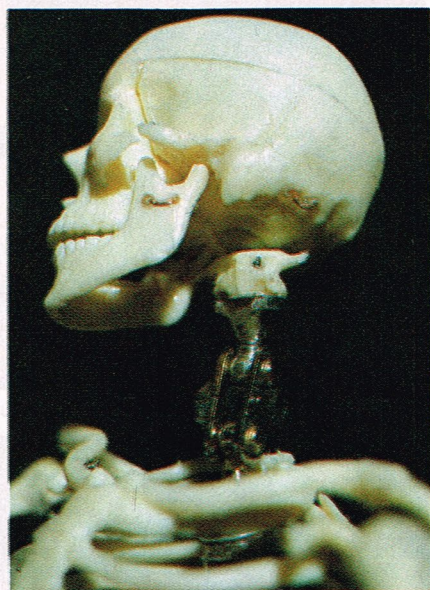


A close-up of the 24-inch skeleton's head reveals the ball-and-socket neck joint. The joint was later hidden under silicon rubber and aging glazes.



PHOTOS: DAVID DUMONT
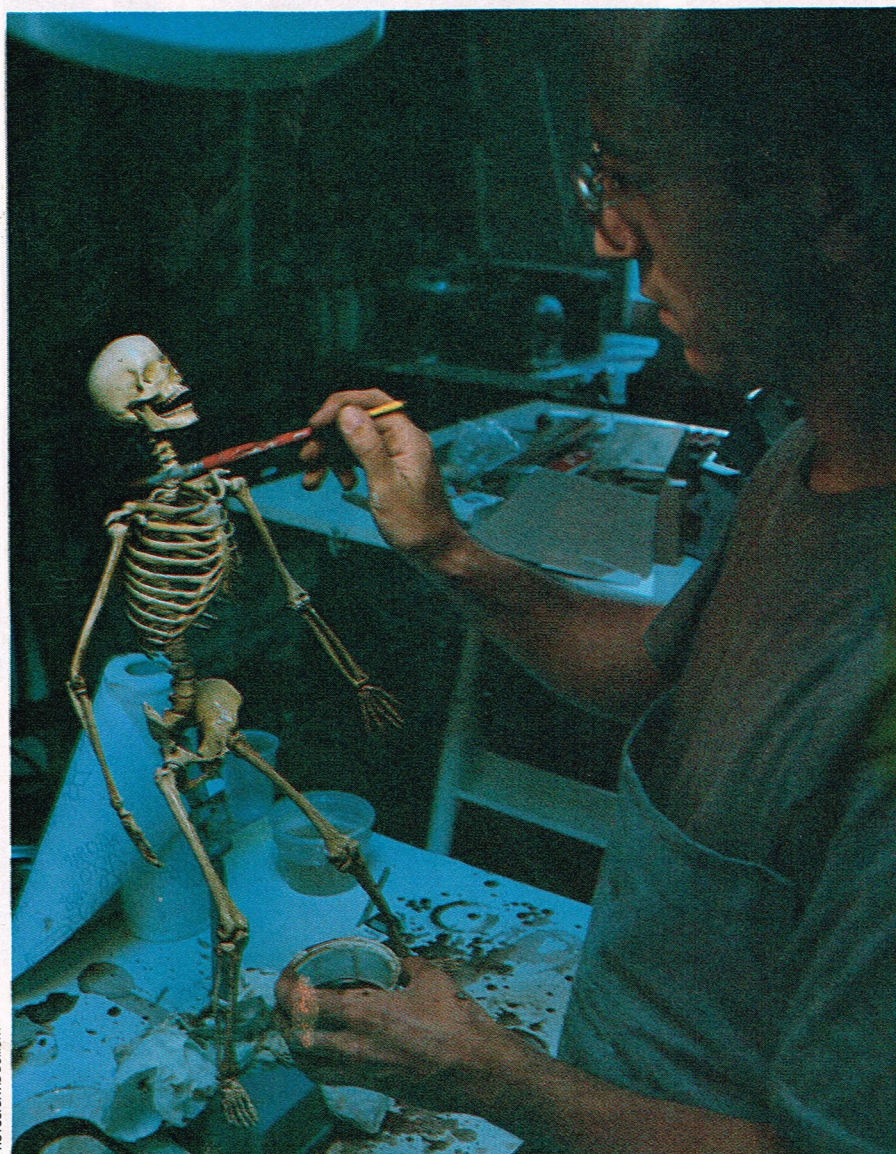
Mike Tobacco applies the aging glaze to the 24-inch stop-motion skeleton. The glaze matched the color of the silicon rubber to the color of the plastic bones of the model kit and made the skeletons look realistic.

Ray Harryhausen's sword-wielding skeleton in *The Seventh Voyage of Sinbad* (1958) is one of the most famous stop-motion animation sequences in cinema history. When the Jacksons decided to have break dancing skeletons in their latest smash video *Torture*, animator Peter Wallach (whose film *Raygun's Nightmare* was covered in issue #27) was hired to bring the skeletons to life on the screen.

"I was very excited about the project when I was approached to create the animation," Wallach begins. "I saw it as a creative challenge that I could get personal satisfaction out of because I saw it as a chance to pay a personal tribute to both Ray Harryhausen and Max Fleischer, who have both been very big influences on me. Everyone remembers Harryhausen's stop-motion skeletons, but this project also made me think of Max Fleischer's dancing cel-animation skeletons in the old *Betty Boop* cartoons."

Although Wallach thought of the sequence as a tribute to Harryhausen, he wanted to try to make his skeletons a little more realistic looking than the ones Harryhausen used in *The Seventh Voyage of Sinbad*. "If you look carefully at Ray's skeletons, you'll notice that they're really just skeletons built over an armature. They were also quite small—only about four or five inches tall. I feel that the skeletons we used—modified plastic kits—were much more anatomically accurate than Ray's. They were also 12 inches tall and much more detailed. Of course, I feel that no one can improve on Harryhausen's skills as an animator.

"There are two types of plastic skeleton kits available," Wallach explains. "There's a Revell kit, and then there's a kit made in Spain that's derived from the Revell kit. We used the Spanish kit because it's made

The five 12-inch skeletons strike a famous Jacksons pose. Wallach rotoscoped live-action footage of the Jacksons' routines to use as reference so the stop-motion skeletons would perform the Jacksons' moves flawlessly. Note the cobwebs and how the careful placement of lights brings up the texture of the styrofoam miniature set and the detail of the skeletons.

of a soft, rubbery plastic that has better qualities for animation than the Revell kit. One of the reasons that I preferred the Spanish kits was that the limb bones had to be drilled out so we could put an armature through the hollow parts of the bones and the Spanish kit wasn't as brittle as the Revell kit, so it lent itself better to drilling. I also liked the fact that the Spanish kit could be soldered together—the rib cages were welded to the modified spinal columns with a hot screw driver. The kits come in two scales and we used one of the larger 24-inch kits for close-ups. We also had a life-size glow-in-the-dark skull kit which we painted and aged for extreme close-ups. The two scales of the kits are made of the same material, so they could be aged and armatured in much the same way.

"My friend Eric Jacobs at the Wizard Works in New Jersey, who drilled out the kits with a Dremel drill, designed and installed the armature. It took the folks at Wizard Works about three days to get all the right parts they needed and to do the work. Mike Tobacco and I spent another two or three days hiding the joints under silicon rubber and aging the skeletons so they had a realistic, bone-like quality.

"The spines had to be very flexible so the skeletons could contort for the break dance routines," Wallach reveals. "The spines for the five 12-inch skeletons were made from little metal goose necks from little goose-necked pocket inspection pen lights. The neck joints were made from hinges taken from pocket inspection mirrors. The goose-neck spines were covered with silicone rubber and tinted to look like aged bone. The silicone rubber—which was very much like bathroom tile caulk—was applied with a Q-tip wherever we had to hide an armature joint.

"The beauty of working with these skeletons was that the joints were very accessible and could be easily adjusted—unlike other stop-motion models where you have to cut in under the "skin" to locate and repair or adjust a joint. Mike Tobacco fashioned little plasticene knee caps to cover the hex joints at the knees.
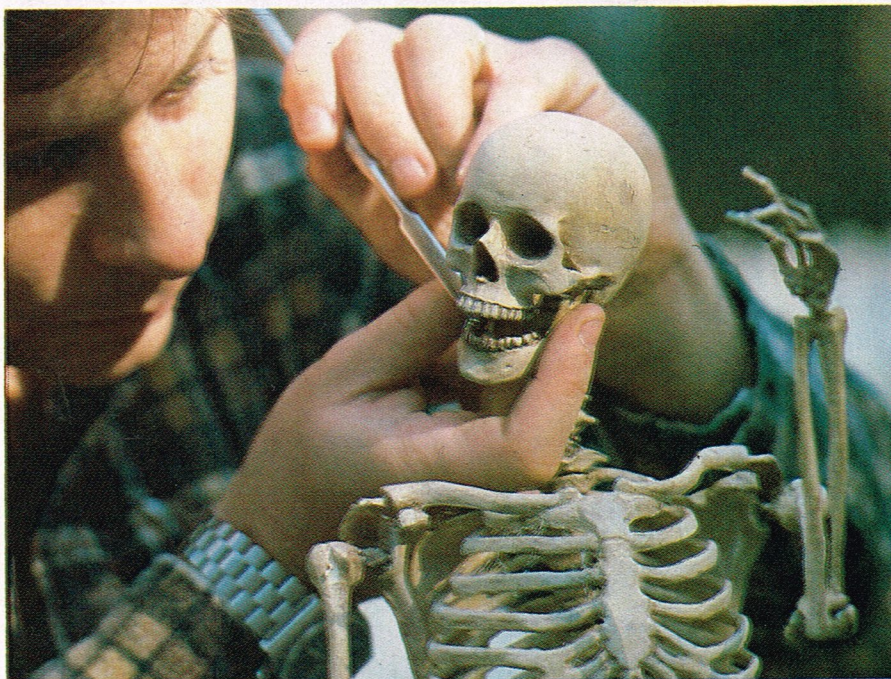
Peter Wallach touches up the 24-inch stop-motion skeleton by applying silicon rubber over the jaw joints with a dental sculpting tool. All of the joints were concealed in this manner.

# Pinocchio

*Believed by many to be the most elaborate and dramatically exciting animated feature ever made, Walt Disney's classic fantasy returns once again to delight another generation.*

Charles Judels (the voice of Stromboli and the Coachman) performs for sequence director Wilfred Jackson and animation director Bill Tytla.

Based on the internationally famous 19th century children's classic by Carlo Lorezini (published under the nom de plume of C. Collodi), *Pinocchio* is a highly moralistic tale of a little wooden puppet who must prove himself worthy of life. Cast in the form of an adventure story, the film includes a veritable who's who of animated characters, including a conscientious cricket named Jiminy, Geppetto the woodcarver, Figaro the cat and Cleo the goldfish. Perhaps no other film is so well remembered for its cast of villains, including: J. Worthington Foulfellow the deceitful fox and his assistant thug Gideon the cat, the brutal puppet master Stromboli, and that terror of the seas, a whale named Monstro.

Riding on the unprecedented success of *Snow White* in 1937, Walt Disney immediately started production on his next animated feature *Pinocchio*. Almost overnight the studio's animation staff swelled from 300 to nearly 2,000. Woolie Reitherman, one of the animation directors on the film, remembers the excitement at the studio.

"Because of the success of *Snow White*, we went overboard trying to make *Pinocchio* the best cartoon feature ever made. We experimented with new techniques, embellished the artwork with tremendous time-consuming detail and modeled the characters to give them roundness and dimension. We even threw out a lot of costly animation, which is something we can't afford to do today."

Milt Kahl, another of the film's animators, remembers the bold experimentation that went into the creation of the film. "We were faced with the problem of how to make a picture better than *Snow White*, which was incredibly successful. The way to do it was to embellish our animation, and spend money and

Sculptor Bob Jones displays the model of Stromboli's tandem gypsy cart. Many of the props and objects in the film were sculpted for the animator's reference.
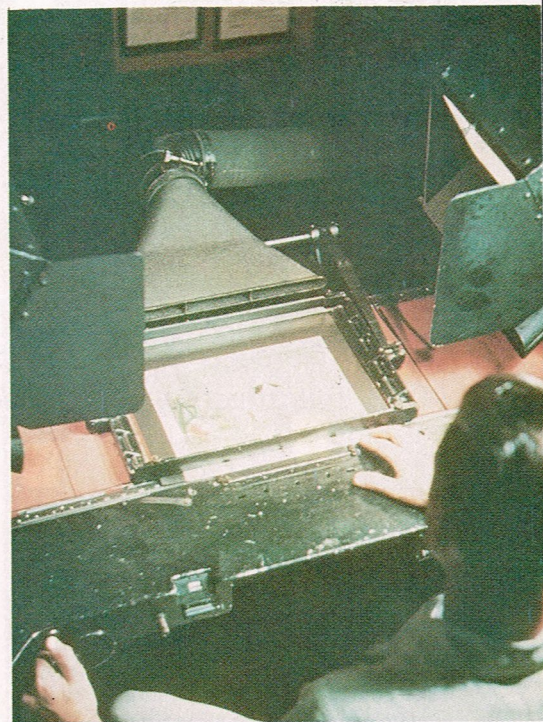


Produced in Technicolor, each drawing was photographed through red, green and blue filters on successive frames.

creative energy like it has never been spent since."

New ways of handling paints and pastels were explored and developed. Innovations in camera operations, lighting, unusual process shots and spectacular animated effects were used. Complex airbrush and dry brush techniques were used for the first time to bring characters to life. Figaro the cat had both dry brush and airbrush work to create a soft furry look. Even Geppetto's hair was dry brushed to eliminate the hard painted edge. Tiny Jiminy Cricket had 27 colors on him (nine is the usual limit today). Cleo the goldfish combined techniques of self-inking lines (ink lines the same color as the paint), transparent paint and subtle "blend" (using a soft waxy crayon on top of the cel) effects.

The multiplane camera, which had been developed at the studio by Ub Iwerks, was used to track characters through extraordinarily finely detailed backgrounds.

"There's a terribly impressive trucking shot at the start of *Pinocchio*," Reitherman remembers, "in which the camera pans the sleeping village and ducks between buildings and down to the street to focus on Jiminy Cricket. The camera boys were so creative with their angles and use of a dozen planes for a 3-D effect, they ran up a bill of $25,000 for a half-minute shot. That was just for the photography. So, Walt eventually had to blow the whistle and try to conserve on the spending."

In addition to technical and creative improvements over *Snow White, Pinocchio* revolutionized special animated ef-

fects, opening the way for *Fantasia*. "No one knew how to light a scene with incandescent dewdrops, or how to animate cartoon characters walking on the bottom of the ocean," explains Kahl. "Glowing candles, flickering lamps and modeling on faces to show roundness was all new."

The design for the character of Pinocchio evolved from a rather spindly looking marionette into a slightly chubby and

boyishly naive character. There are also remarkable contrasts between the character as he appears in the original 1883 story and the Disney version. In author C. Collodi's tale, Pinocchio is brash and sometimes cruel. He is also constantly in trouble. He is trapped, pursued by assassins and suffers his feet being burnt off among other adventures. What could have been called *The Perils of Pinocchio*

Both Geppetto's shop and the underwater sequences proved to be special challenges to the Walt Disney sound effects department.

# Anatomy of a Stunt Crash

*Here's a stunt that young filmmakers should not be trying on their own, but which offers a look into the dangerous world of special effects crashes.*

By PHIL MURRE

The dream of many a movie-maker is to do an effective car crash. By effective I mean safe, successful, and spectacular. As is evidenced by Hollywood movies and prime-time television, America loves car stunts. How hazardous would the Dukes be without their "General Lee?" Hollywood makes it look so simple. Effortlessly, our heros smash car after car after car. But to circumvent the danger, much planning must precede each stunt.

During the summer of 1983, I worked as a cameraperson on a production called *Courier Express*. It was a fast-paced chase-movie created in a music-video format. The plot centered on a courier service that guarantees immediate delivery—at any cost. The story began with a car chase that culminated in a crash.

Roger Nygard, the director of *Courier Express*, explains the conceptualization of the stunt: "In *Courier*, our heroine is driving a Lamborghini race car so that she can
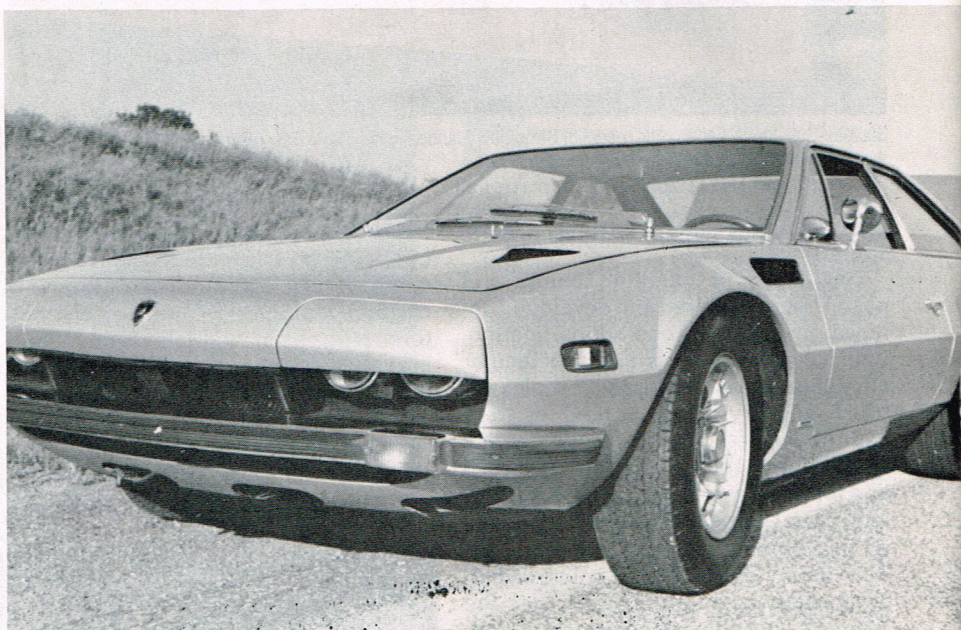

The real Lamborghini used in "Courier Express." It has twelve cylinders and six hundred horsepower.


Hoffmann hits the ramp on target, ignites the special-effects bomb, and finds himself airborn.

outdistance any pursuers. Unfortunately for her, the script says that her car gets a flat tire, hits a woodpile and crashes." Nygard, a twenty-two year old senior at the University of Minnesota, continued to say that, "Since we could not afford to destroy the real Lamborghini, we built a stunt car. We purchased an old Pinto and transformed it into what we called the 'Pintaghini.' "

Using three gallons of Bondo, eighteen cans of spray paint, two sheets of plywood and assorted trimmings, the crew fixed up the old junker to look like the real thing. After the car was ready, it was turned over to the stuntman so that he could prepare the car's safety measures.

The stuntman was twenty-six year old Aaron Hoffmann, who has crashed and rolled more than fifteen cars. For Hoffmann, crashing cars is not a profitable venture—it's more of a hobby.

Hoffmann explains his contributions to *Courier Express*: "After I got the car, it took me two days to prepare the extra safety precautions and the special effects. I try to anticipate everything that can go wrong and then I do what I must to be sure it won't. I expect the worst and prepare for it."

Preparing the car is a two-stage process. Hoffmann says, "I remove parts and then I add things. First, I either remove the gas tank or else I disconnect it and fill it with water. Then I install a special fuel container to hold just enough gasoline to do the job. I usually take out all the windows, although I sometimes leave the front windshield in because it's made of safety glass." The viewer cannot tell that the glass is missing because the car is moving too fast. Hoffmann then removes all hazardous knobs, handles and loose panels. He finishes this stage by cleaning out all loose matter from inside the car.

For the second stage, Hoffmann adds extra padding and support to the car. He puts padding on the steering wheel, the driver's seat and the roof. He doubly secures the seat to the car and adds a modified seatbelt harness. Then, depending on the type of crash, he sometimes installs a roll bar to prevent the roof from caving in. He also wires the hoods and doors shut to prevent them from opening during the stunt. As a final measure, he wears padding, a helmet with a face shield, heavy leather and flame-resistant clothing.

After finishing the safety precautions for the *Courier* stunt, Hoffmann prepared the special effects. He placed a charge underneath the car to make it look like the car had exploded and rolled because of the explosion. He detonated an explosive liquid electronically with a special switch attached to the steering wheel. Hoffmann says, "The most likely way a driver would be hurt in a crash like this is if the car continues to burn once it stops. Therefore, I had eight assistants with fire extinguishers. They all had special instructions on what and what not to do."
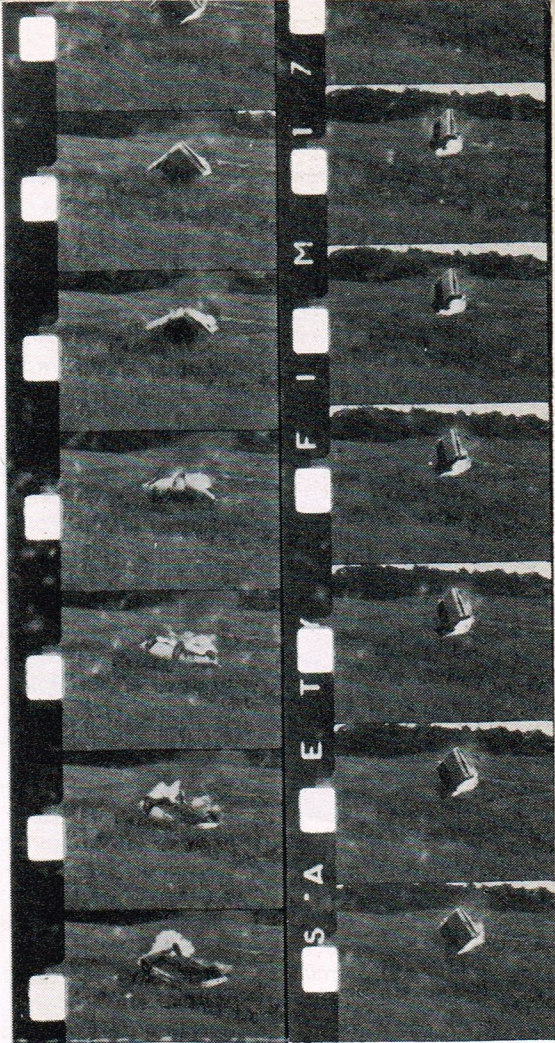
On location, Hoffmann set up his stunt ramp next to an open field. He designed the ramp based on ideas that Ky Michaelson, a veteran stunt engineer from Minnesota, used for a crash in the movie *Purple Haze*. The ramp is called a bar ramp or pipe ramp and it is twelve feet long and three feet high. Hoffmann explains, "A friend of mine named Charlie Bettinger built it using angle iron, construction reebar, and a special long piece of iron. A driver has better control with this kind of ramp because he doesn't have to concentrate on hitting the ramp with his tire. He only needs to hit it with one half of the car." The ramp was positioned at the edge of the road and staked into the ground. Logs were secured to the ramp to make it look like a woodpile.

"I planned for the car to roll two times and, with luck, one half more to end up on its roof. I had a quarter-mile runway that was not too curvy or bumpy, so I was able to coax the car up to fifty-three miles-per-hour by the time I hit the ramp."

The car flew about forty feet. The ramp gave it a spiral momentum as it flew through the air and because of this, it was ready to roll when it hit the ground. The car actually did roll two and one half times and once it was on the roof, the special-effects bomb that had ignited in the rear had almost burned out. As the car came to rest, the crew swarmed on it and put out the remaining flames and helped the unharmed Hoffmann out of the wreck.

Although he has no immediate stunts lined up, Hoffmann plans to continue crashing cars. "Some people say I am crazy for doing this," says Hoffman, "but to me it is no more dangerous than something like hang gliding. Danger is the result of carelessness. A calculated crash is something that is planned so that problems are weeded out. But it only takes four pounds of pressure to break a neck and, with this kind of stunt, it's easy for this to happen if every precaution is not taken.

"I would not encourage any beginner to try a car stunt without experienced supervision. I rolled my first car off an old washing machine, milk crates and some old boards. I learned the hard way how to crash cars and how to protect myself and I wouldn't want somebody else to go through it and expose himself to the danger."

A stunning car crash is not beyond the means of amateur filmmakers. According to Nygard, the total cost for the *Courier Express* stunt was $450.00. Most of the effort went into planning and preparation. The stunt was successful because all possible contingencies were accounted for before the stunt was attempted. This was done so that nothing was left to chance—because there was only one. CM
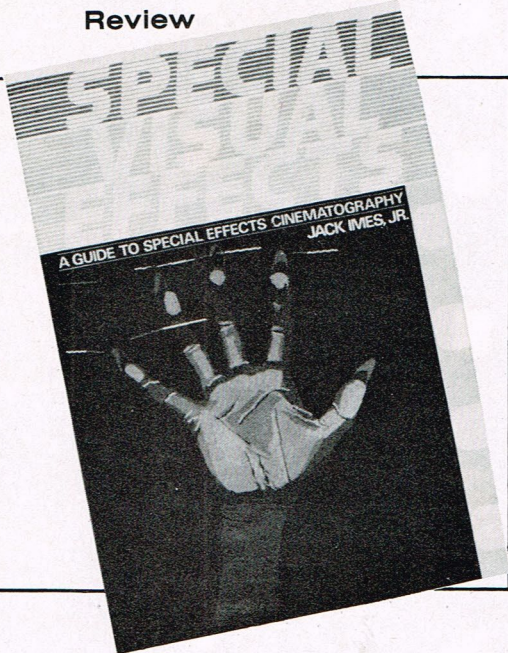

The finished stunt roll as seen frame by frame on Super-8 film. Don't try this yourself!
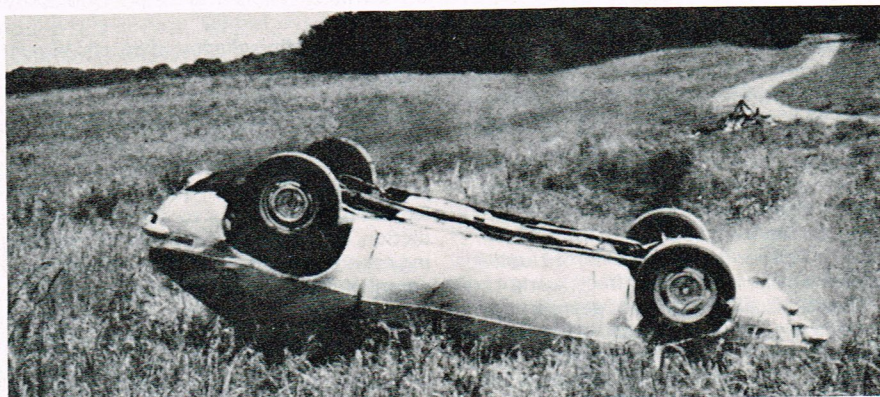

PHOTOS: COURTESY OF PHIL MURRE
The car's final resting place, with the ramp and runway in the background.

# BOOKS

Review



**Special Visual Effects, by Jack Imes, Jr. Published by Van Nostrand Reinhold 232 pages Cover price: $30.50**

The video revolution is here. Let's face it—more and more people are, unfortunately, hanging up their Super-8 cameras and getting their hands on the latest Betamax. This means that there are fewer and fewer film related books being published (If you don't believe me, just go to your nearest bookstore and compare the size of the video section to that of the almost non-existent film section). This turns almost any new, film related book into a godsend. But, as CINEMAGIC readers, you not only want your basic film book, you want a special effects book (We're talking major miracles here)! Well, you want a miracle? You got one. It's called *Special Visual Effects* and is, as you might have guessed, an effects book. It's expertly written by Jack Imes, Jr., a frequent contributor to CINEMAGIC, and it is indeed a very welcome and refreshing addition to the ever-dwindling library of effects books.

First off, the book is very well made. It's got 232 top-quality pages bound in a long lasting hard cover. There are also hundreds of black and white pictures and illustrations, all beautifully reproduced. The price tag is also very professional: $30.50.

It doesn't matter, though, whether you're just a beginner who wants to know what's out there or if you're George Lucas; *everyone* can learn something from this book. It's a serious, no-holds-barred look at all aspects of professional effects work.

*Special Visual Effects* is not geared towards any one format (such as Super-8 or 16mm). It covers everything from storyboarding your effects shot (which anybody can do) to high-tech optical printing and

blue screen which not everybody, especially CINEMAGIC readers, can do.

The explanations are thorough, though very technical and, sometimes, very confusing. This doesn't seem right since it's billed as a book that will give the beginner an understanding of how spectacular effects are done (in films such as *Star Wars* and *Superman*); but there's no way a beginner is going to understand a lot of what's said! For example: In the chapter on optical printing, it says, "A Continuous Contact Printer runs an entire negative and duplicate positive roll paired in close contact at a continuous high speed under the printing exposure light source." What? Say that again? Much of the book is like this (though the chapters on optical printing and motion control are the worst offenders) and having some knowledge of special effects work would greatly help in understanding it.

Though no one wants to be confused out of their skull, this does not have to be the case. I've found that reading certain material more than once (and a bit more slowly and carefully) often does the trick. But, if you're looking for step-by-step, easy to understand explanations as in CINEMAGIC, this book is not your cup of tea.

The other, less technical subjects it goes into are all covered very well (if not a little confusingly). The chapter on stop-motion animation examines everything from the ball-and-socket armature to actually baking the finalized model in your own oven!

In fact, the best point about the book is how it goes into detail about its subjects, giving many different examples and variations of each. It also covers certain problems encountered with various effects and how to solve or work around them.

One of the most annoying things is this book's frequent use of the words "costly" and "inexpensive." I have nothing against these words, except when I'm not told *how* "costly" or "inexpensive." As you might have guessed, this is exactly what the book fails to do. While reading, I had very little idea if a particular effect was within my budget. It's not a total disaster, though, because a list of supply houses (mostly located on the east and west coasts) is provided at the end. This means all you have to do is write or call *them* and ask, "How costly (or inexpensive) is this?"

The concluding chapter of *Special Visual Effects* provides something many books do not: A list of projects you can immediately begin work on using your newly aquired knowledge. These projects are geared towards super-8 and 16mm and are fairly simple and inexpensive (on CINEMAGIC terms) to do. This is great, but sort of a contradiction. If you already have some film making experience, then you have probably completed 50% or more of the listed workshops; if you're a beginner, then you probably didn't understand enough of what you read to do any of the projects! Still, though, it is helpful in that it does simplify what was discussed in previous chapters. It shows you

that it's not impossible to scale down big Hollywood effects for a shoestring budget.

This book also contains a glossary of terms (to help 'unconfuse' you), a few pages on safety hazards and a bibliography of over 30 books and publications that would probably be of interest to CINEMAGIC readers.

All in all, *Special Visual Effects* is a comprehensive study of all kinds of special effects. It mostly covers what something does and why. Though it doesn't tell you exactly how to do an effect, it certainly gives you a head start and a solid understanding (in most cases) of how the effect works.

If all you want is a very simple "What does it do and how do I do it?" and if you're not interested in the mechanics involved, this book may not be for you. On the other hand, if you hunger for a solid understanding of professional special effects work and are serious enough to sit down and go through this book, then buy it. Now.

If I were putting together a library of books that cover *all* the different areas of film, my effects book would definitely be *Special Visual Effects*.

—*Adam Lebowitz*

## Publisher's Announcements

# Scheduling

*Film Scheduling, or How Long Will It Take To Shoot Your Movie?*, a new book by Ralph S. Singleton (Lone Eagle Publishing, Beverly Hills, CA, $16.95, paper, is the first complete, step-by-step guide to *professional* motion picture scheduling. It features a foreword by Jonathan Sanger, Academy Award nominated producer of *The Elephant Man* and *Frances*, as well as a complete full-color fold out production board of Francis Coppola's Academy Award nominated film, *The Conversation*.

From the publishers of the popular annual reference book, *Film Directors: A Complete Guide, Film Scheduling* is designed for the film professional as well as the student. Author Singleton writes in easy to understand terms, taking the reader through script analysis, script breakdown, color coding, preparing breakdown sheets, production board analysis and preparation of the final shooting schedule. All examples are based on *The Conversation*. In addition to the color fold-out production board, Singleton has included two other separate production boards showing the various steps of preparation, a full 41-day shooting schedule, a glossary of terms and an index. He encourages readers to follow along and learn how to make their own production boards.

In addition to *Film Scheduling*, Singleton has authored the following forthcoming books also from Lone Eagle Publishing: *Film Budgeting* (January 1985), *Film Scheduling/Film Budgeting Workbook* (October 1984), *The Filmmakers' Dictionary* (October 1984) and *Movie Production and Budget Forms... Instantly!* (November 1984).

# Stunts

to do something unless *you* know how to do it! Many top stunt men today would rather do high falls and car crashes than fight scenes. The reason for this prevalent attitude among stunt men is that many a stunt man has really gotten punched by actors who were novice fighters.

Proper training is important. Make sure your actors know how to move well. Have they had *any* athletic training? You don't want people getting belted for real in your films. Not only will it not sit well with the actors, but real punches on film for the most part do not look good. Work with your actors. Train them. If you are just a novice, get training yourself and have your actors trained as well. A well-rounded fight choreographer will have knowledge in various forms of karate, kung-fu, judo, gymnastics, boxing, wrestling, swordsmanship (and other weapons), as well as knowledge in *filmmaking*.

Remember also, weapons are dangerous and should only be handled by people who know what they are doing. I know you've heard it before. But I've seen too many "accidents" and I can't over emphasize this point. If you are not experienced with weapons *find somebody who is*—and try to use safe props instead of real weapons when ever possible.

**Step Three:** Now it's time to shoot. Remember a punch or kick is only as good as the angle it is taken from, so talk to the director and see what he wants. Talk to the cinematographer and see if he is experienced in shooting fight scenes. If not, get together and *communicate*.

Always look after the actors and stunt people. Calculate their moves, rehearse them extensively so the movements become second nature. Make sure they have stretched out and warmed up to avoid muscle pulls and other injuries. Make sure they have not eaten at least two hours prior to a vigorous scene. No vomiting please! Also make sure they are padded properly for flips and falls.

If an actor is injured it can hold up or stop a production and cost a great deal of money. This is the reason why many top stars are given limitations on the stunts they can perform. Insurance! Try to have your production insured. If it is an amateur production, this may sound expensive and unnecessary, but remember if there is a serious injury there may be some serious trouble. Be careful.

Here are some other guidelines to choreographing a fight scene:

*Angles*—Make sure that the punch or kick matches the camera angle (see diagram).

*Reactions*—A great reaction can make a mediocre punch look good and a bad reaction can make a great punch look bad. Reactions are just as important as the punch or kick. This is where acting also comes into play. You don't want to under or over state your reaction (with the exception of stage where you may have to over state). Instead, experiment with your reactions and see what looks good.

*Sound Effects*—Proper sound effects are also incredibly important. As with reactions, sound effects can make or break a fight sequence. I've seen many a good fight scene ruined by effects that sounded like a couple of guys slapping their hands together or hitting the keys of a typewriter. I personally prefer the bone-jarring punches of the Clint Eastwood films. You may prefer the wood-breaking sounds of the Bruce Lee movies. It's your choice, but keep in mind—whatever your decision—punches or kicks to the body should have a "thud" quality, whereas punches to the head should have more of a sharp, cracking sound.

## Wild Goose Chases

The *chase scene* is another important aspect of action. It is often used as a lead up to a fight scene or can sometimes climax without a physical altercation. Some chase scenes have become so popular that they are the most remembered part of a film. Examples of this are: *Bullet*, *The Seven-Ups*, *The French Connection*, *Blue Thunder*, *Raiders of The Lost Ark*, *Live and Let Die* and *Ben Hur* (even though the "chase" scene in *Ben Hur* is really a chariot race it still possesses chase elements and is the most remembered part of the film).

As with fight scenes, certain things must be considered before you can choreograph your chase.

**Type of Chase**—Here there are an infinite amount of possibilities. It can be a car chase, a horse chase, a chase on foot, a boat chase, a helicopter chase, etc. Choose the type of chase that best compliments what the script calls for. Usually when a fight or chase are written into a script they are not described in precise detail. They are usually given over to the stunt coordinator or action choreographer who will work hand in hand with the director to provide an excellent scene. Show some initiative. Stick by something you know looks good and be vocal enough to say what doesn't.

**Character & Story**—Make sure that the chase fits into the flow of the story. It will be painfully obvious to an audience if your chase or fight was just thrown in for the hell of it! Also make sure that your characters are capable of their actions. For example, if all of a sudden a character just jumps into a helicopter and takes off in pursuit of somebody, it might not sit well with an audience. At least establish with a scene or a simple line of dialogue that your character can perform the action indicated on the screen.

Another point of concern is the *length of the chase*. You have to use your own judgement in determining the right length. This may be the hardest part of all. If the chase is too short, the audience may feel cheated and it may deter from the impact of the film. However, if it is too long, it may become too boring and also detract from the pacing of the film. The best possible chase scene is a coordinated effort between the action choreographer, the writer, the director and the film editor (who is chiefly responsible for the film's pacing). After a while you may acquire a gut feeling for the appropriate length of a chase. Again—as with the fight scenes—the best advice I can offer is watch and compare. Some films which contain excellent chase scenes are: *Ben Hur*, *The Seven-Ups*, *The French Connection*, *The Road Warrior*, *Live and Let Die*, *Diamonds are Forever*, *Night Hawks*, *The Hunter*, *Time After Time*, *Return of The Jedi*, *The Empire Strikes Back*, *Raiders of The Lost Ark*, *The Warriors*, *The Great Escape* and *Blade Runner*.

Watch and compare. Notice the structure and content of the chase scenes. Notice their length and how they are photographed and edited. Maybe you can be observant enough to pick up some techniques that you can use in order to produce a dynamic chase scene.

**Shooting**—Again, storyboard your chase. Break it down into its simple components, but always be ready to improvise. You might come up with a brilliant idea while seeing something you can use on location (a building, a bridge, a sign, an odd-shaped road, etc.). Also make sure that your stunt people are competent and are qualified for their specific jobs, whether it is flying, driving, riding a horse, etc. Again, insurance is of importance and depending where your chase takes place, a coordinated effort may have to include the Police Department, The Fire Department and other local agencies to insure public safety.

Consider the basic advice and steps I have listed. These are things that have worked for me and I hope they can aid you in understanding what goes into an action sequence as well as guide you in creating an action sequence for your production. As with anything else, experience is the best teacher. The longer you work at it and the more you try different techniques, the better you will become at choreographing action sequences for film. Good Luck and remember: lights, camera, action and with an emphasis on *action*! ◐

Bob Griffith is the co-founder of Constellation Productions and founder of the award-winning "Action Unlimited Stunt Team." A director, action choreographer, writer and actor by profession, he has recently written several feature length screenplays and is in pre-production on a feature film. He also serves as segment director and writer for the cable TV show "MAD-TV."

# The Mr. Clean Look

*Plastic bald pates can give the curliest-topped actor a smooth head.*

By FRANK ROGERS



Plastic caps are available from Chambers and Kryolan. The Chambers cap is thinner and comes in three sizes.

**W**hen I was ten years old and just getting into makeup, I kept dreaming of some easy-to-apply makeup effect that wouldn't require a lot of time for casting and sculpting. I dreamed of blending edges that would melt into the skin—maybe even a one-size-fits-all appliance that would stretch to fit. I fantasized that this makeup effect could ultimately be worn on the street without detection. If this sounds like something out of Rollin Hand's makeup kit from *Mission: Impossible,* you will be pleased to find out that it isn't. There's now a product that comes close to fulfilling my childhood dreams of an easy, yet effective, makeup effect—the plastic bald pate.

Plastic bald pates *can* be worn on the street and—if properly applied—are almost undetectable. Plastic caps have the finest blending edges of any commercially available appliance because you literally dissolve them away with acetone. They also have enough stretch to fit most any subject. You've seen these caps used for *Superman's* Lex Luthor and TV's Caine in *Kung Fu.*

The only disadvantage of plastic caps are the price, (around $20), the lack of skin texture (alleviated by stippling makeup shades) and the problem of wrinkling at the back of the neck. The cap does tend to wrinkle because it cannot be adhered to hair—only skin—so it tends to wrinkle when the head is turned. If you will notice, when this type of cap is used, the costume designer will usually provide a high collar or some other gimmick to hide the back. Remember that Luthor often appeared with a towel around his neck.

### Necessary Stuff

Plastic bald caps differ from the rubber caps sold in novelty stores in two major ways: the price and the ability to dissolve the edges with acetone. There are two brands that I am aware of: Chambers and Kryolan. Chambers is a thinner cap and comes in three sizes. It's available from Sig Friends Beauty Supply of North Hollywood. [Addresses of several makeup supply houses are at the end of this article.] The edges are very thin and can almost be blended without acetone. It is helpful to make a head measurement when using a Chambers cap. Kryolan makes a thicker cap, which means the edges are harder to deal with, but covering the texture of your actor's hair is an easier matter with this thicker cap. It comes in one head size, but two nape lengths. Both caps are excellent products and have plenty of stretch to fit different head sizes.

Spirit gum is always a topic of discussion among makeup artists as to which brand is the strongest or tackiest, so until *Consumer Reports* does a scientific test, let's just say that for caps it's best to have a thick, tacky gum. Any gum can be made thicker by leaving it open to the air for eight to 24 hours. Spirit gum remover will also be needed. [Unless you plan to wear the pate for the rest of your life.]

A stronger group of adhesives that are a good alternative to spirit gums are the medical adhesives which seem to be a close cousin to super glue. Some brands are RCMA Adhesive "A", the Makeup Place's 101 and 101A and Kryolan's Medical Mastix. Don't forget to get appropriate remover with the adhesive. *Do not use these products near the eyes.*

You will also need makeup to cover the transparency of the caps. Though many artists use regular creme makeups, I use rubber mask grease because it provides better coverage than regular makeups. Rubber mask greases (RMG) are made by almost every line of professional makeup



Be sure to smooth out any air bubbles and make sure that there are no wrinkles between the forehead and ears.

(RCMA, Kelly, Steins, Mehron and Kryolan) and are carried at any large makeup supplier such as Makeup Place, Sig Friends, etc. The major problem with RMG is that it tends to rub off when a hat or wig is placed over it.

You will also need two wide, flat two-inch brushes for spirit gum and acetone (one for each), an eyebrow pencil for marking, acetone for dissolving edges, water, hair gel (like DEP) or a thin nylon wig cap for controlling the hair. Other items needed are a red rubber sponge and a black stipple sponge to apply the makeup. All of the above materials are available at any good theatrical makeup store.

Makeup base should be stippled on. You will probably have to make the head several tones darker than the face.



PHOTOS: COURTESY OF FRANK ROGERS

Acetone is applied along the blending line to dissolve away excess material. The remaining edge should be very thin and uneven to make an unnoticeable blend.

### Getting Ready

Most actors assume that they'll have to cut their hair short to wear a bald cap. The problem is not usually the length of the hair—it's the thickness that the hair creates under the cap. You can put a lot of hair under a cap as long as it doesn't leave a shape or make the head appear too large. Try putting the hair up in a loose pile. The hair can be held in place with a wig cap (bought from wig shops) or a piece of nylon cut from a pair of hose.

Avoid hair pins because they can puncture the cap. Braids and bund can be used as long as they're loose and don't leave an obvious shape when the cap is stretched over the head. Water and DEP can reduce the hair thickness but this is less comfortable for the actor.

Kryolan bald pates are slit up the front to get them off the mold. You must cut a smooth curve in the front of the pate before handling to keep them from splitting. When cutting, always cut in a smooth curve because any ragged edge will run or split. The biggest disadvantage to a plastic cap is its tendency to run.

Now, study your actor's head shape and decide your best possible blending line. You'll want to find a shadow area to hide your blending line. If the eyebrows are to be covered, you can do the blending under the eyebrows, but this decreases the expressiveness of the actor's forehead. Many makeup artists use an area just below the hairline as a blending line, but TV and film lights are often above the actor at a 45-degree angle, and this area is often highlighted. Many actors have a shadow area in the middle of their forehead where the planes of the forehead meet. This shadow area is often your best blending line.

### Capping it Off

If there's any secret in applying a plastic cap, it's in doing a careful test fitting to work out any problems before the applications. Have the actor hold the front edges of the cap in place at the blending line on the forehead. Having him hold the cap also alleviates any strain that might tear the front edge of the cap. Pull the cap down slowly from the back. Air will be trapped, so work slowly.

Step back and take a look. Is the cap sitting evenly on the head? Is there a visible pattern from the hair underneath? Do the sideburns show a ridge? With the actor holding the lower edges of the cap, have him move his head and neck to see if wrinkles form on the top of his head or neck. The tighter the actor pulls down, the fewer wrinkles, but there is a greater likelihood that the cap will pull away when glued in place. Have him pull the cap as far forward as possible to eliminate wrinkles in the back of the neck.

Now, mark your blending lines with a pencil. Mark the forehead blending line. For the ear blending line, mark a backward "C" shape that is a little larger than the base of the ear, but not quite as large as the ear. The larger part of the ear will fit through the hole and the "C" flap will be removed when you apply the cap.

For the jaw blending line, mark a smooth curve about one or two inches below the ear. This shape holds the cap more snugly with less likelihood of tearing than cutting around the sideburns. I don't usually cut much of the back of the cap off because this is the area of the greatest strain, so the greater the glued area, the better. I do shave the area so that if the cap does let go, it won't take hair with it.

Take one more look at the cap to see what problems can be corrected before application. Take the cap off and with a sharp pair of scissors, cut only the ear holes. The other edges will be cut later. Cut in as smooth a curve as possible because any rough edges will tear. Now reapply the cap. Is the ear hole pulling up on the ear and distorting it? Pull the cap
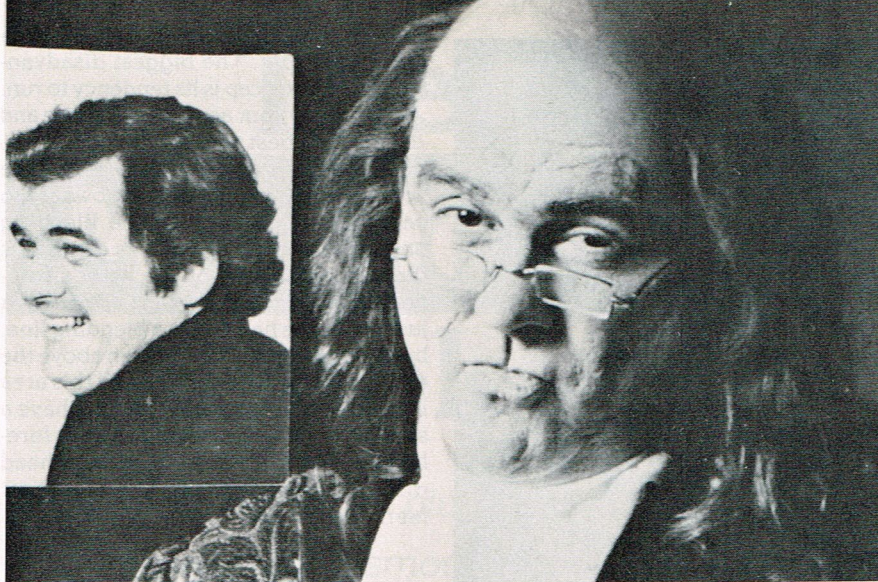
Before and after: an actor impersonates the famous statesman Benjamin Franklin. The addition of "shoulder length fringe" to the bald-capped actor completes the likeness.

down and double check the blending lines and tension on the cap. If the ear hole is still pulling, cut it lower.

### Putting it On

Clean the cap with alcohol to remove residue of any separators or hand oils. Clean the actor's face with alcohol or Sea Breeze to help the adhesive hold. Have the actor sit up straight and use a drape to protect his clothes. Spirit gum is very hard to remove from clothing. Now pull the cap in place as before. Stop and check the fit, because mistakes at this point are hard to correct. Check to see where the blending line is marked. Fold the cap back to the hairline on the forehead and apply spirit gum from the area below the hairline down to the blending line.

Tack the gum with your finger till sticky. Now pull the cap into place. Check the fit and adhere. Press down the cap, working out any air bubbles. Pull the ear flaps into position. Check to see that no wrinkles are being formed between the forehead and ears and that the ears are not distorted. Peel back the ear flaps and apply gum and fit as before. Make sure all skin is covered with adhesive. Remember that, at the "C" flap, below the ears and at the forehead, you will have excess cap material that is not adhered to be removed later.

Now lean the subjects' head back to reduce strain on the back, peel up and adhere the back of the cap. Make sure you have not glued in any wrinkles. If so, peel up the cap and readjust the tension on the cap. Make sure the subject does not move a great deal under the cap once it is fully adhered.

If you'd like to use the surgical adhesives, Dick Smith suggests that you apply adhesive to both the cap and face and powder both. Now you can adjust the cap to suit you without it adhering instantly. Then, take acetone and let it bleed up into the cap by osmotic action

to reactivate the adhesive. These adhesives hold so strongly that less glue area is necessary to hold the same tension.

Now for the magic! Take your brush and acetone and apply it along the blending line of the C flap next to the ear. Pull the "C" flap with the other hand towards the back of the head. I use a stiff brush and scrub a little if it doesn't start to dissolve immediately. The cap will dissolve leaving a very thin uneven blending edge (the best kind). The acetone may remove a little of the glue underneath, but that can be touched up later. Now pull the cap material below the ear down, but not away from the head and cut your blending line with acetone and brush.

When you prepare to work the forehead—(the most critical of the blending lines)—make sure that the subject's eyes are very well protected. Have the actor hold a towel or cotton below the blending lines as you work to keep acetone and dissolved plastic out of his eyes. Be *very careful*. Work slowly, keeping tension on the excess cap material at all times. The spirit gum holds the blending line so that it is a little like tearing paper on the edge of a desk. Blot off the acetone and check for thick edges that can be thinned more with acetone on a cotton swab. Make sure that there are no loose edges caused by the acetone seeping back past the blending line.

### Hairy Problems

Your subject's hair color will usually show through the cap, so the cap will need to be covered with some type of makeup. If the color you prefer is not made in RMG, you can take a pancake color and grind it up with a few drops of castor oil, which is available at your local drug store. RMG presents a problem because nothing can be glued on after the RMG is applied. RMG also has tendency to rub off. I have used both Glatzan and Kryolan acrylic emulsions to solve this

problem, but this technique would require another article to explain.

Take a large sponge and stipple on your base makeup. Don't rub, because this will cause streaking. To overcome a lack of texture, stipple on a lighter base color. You may add a cream color to the original base and a darker color (red-brown, gray-brown or blue-brown) leaving little dots of color without attempting to blend them together. The audience's eyes will do that for you.

After this, apply a similar color of regular base makeup on the face. RMG is not good for facial applications because it appears heavy on the skin. The head can be several tones darker to help out the lighting people, and this is not noticeable on the screen. Often a base color called *Sunburn* or *CVA Red* can be used to suggest a more human warm tone. Beard stipple or Eddie Leonard Pancake (Max Factor) can suggest hair growing back from a shaved head. Powder the makeup with regular transluscent powder. Some artists use suntan oil or glycerin and mineral oil mixes to give the head more life.

### Taking it all Off

Use spirit gum remover to remove the spirit gum (usually an acetone and mineral oil combination) or the recommended remover for your brand of medical adhesive. The fastest way is to split the cap in the center and brush the remover from the inside. Otherwise, lift a loose edge and work the remover up under the cap with a brush. I save my old caps, cleaning off RMG with grease relief and use the caps for protecting hair while head casting or cutting them up to make eyebrow covers.

There is nothing new or revolutionary about these techniques. They are mostly compilations of information from Kryolan, Vincent Kehoe, Frank Westmore and Dick Smith. You'll probably do very well on your first attempt. As a final word of caution: be careful with the acetone and medical adhesives they can be dangerous if misused. ◑

# PINOCCHIO

was transformed by Disney into a much simpler and appealing story.

Nevertheless, the Disney version is also remembered for many scenes with powerful characters and sophisticated imagery. The volatile Stromboli, who can bend steel washers in his bare teeth, is a villain of enormous power. Bill Tytla, an animator who created characters of extraordinary power and tenderness, was responsible for Stromboli's dynamic screen presence.

Villainy is everywhere in *Pinocchio*. Particularly striking are the faceless brutes who pack boys-turned-into-donkeys into crates for shipment—destined to spend their lives as beasts of burden in some salt mine.

And terror. There is the unforgettable image of Pinocchio's friend Lampwick on his knees begging for help as he is rapidly transformed into a donkey. As Lampwick's hands grasp at Pinocchio's shirt, they clutch and are changed into hooves. The shadow of a donkey is seen on the wall, braying and kicking in terror.

Other less terrifying moments seem designed only for adults. For example, after Pinocchio's apparent success as the star of Stromboli's show ("I've Got No Strings"), Jiminy, who has been watching the crowd pour money and adulation on his friend, says: "Well, I guess he won't need me anymore. What does an actor want with a conscience anyway?"

When *Pinocchio* was finished in 1939, Disney was pleased because the critics had unanimously acclaimed *Pinocchio* superior to *Snow White*. But the film had cost $2.6 million to make and it would be many years before that cost was repaid.

"We were just coming out of the depression and there wasn't a lot of cash flow," Reitherman recalls. "Yet we spent over two-and-a-half million dollars on it. In those days, we were drawing a weekly salary of $15—and that was big money."

Many reasons have been suggested for *Pinocchio's* lack of immediate financial success. Some of *Snow White's* instant success was due to its novelty. Also, *Snow White* was a fairy tale romance, while *Pinocchio* was basically an adventure story. Indeed, the only female characters are the Blue Fairy and Cleo the goldfish.

But the film has come down to us today as the most elaborate and dramatically exciting animated feature ever made. It has been estimated that it would require a budget of over $25 million if made today. If you have never seen this most magical of Disney animated films or don't remember it very well, now's your chance—look for it in re-release during the Christmas Holidays. 🄬



PHOTOS: COURTESY WALT DISNEY PRODUCTIONS

Animators work on J. Worthington Foulfellow's character expressions in this circa 1939 photo.
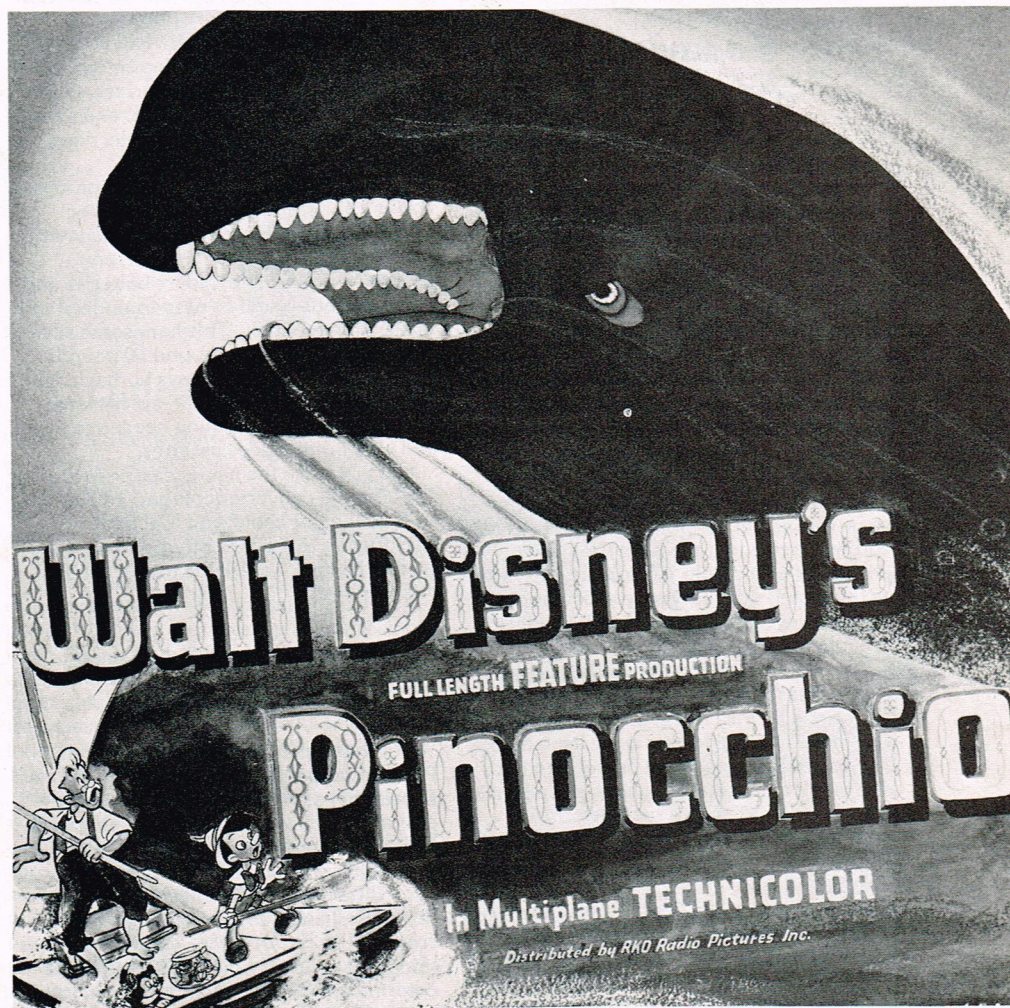


An example of early poster art for the film.

PHOTO: COURTESY DAN SCAPPEROTTI

# GRIP KIT
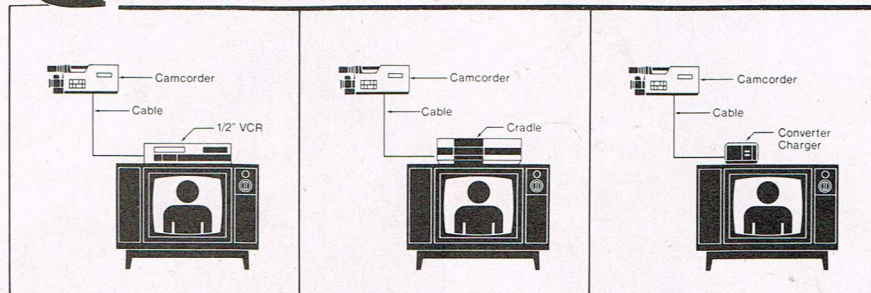


With VHS or Beta 1/2" VCR | With Cradle | With Converter Charger
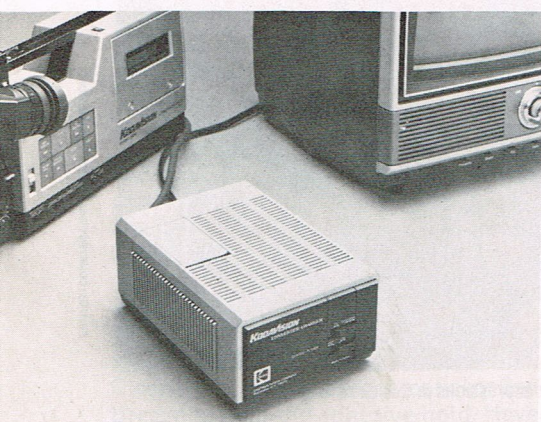


## Kodavision Accessories

Two new accessories for its Kodavision series 2000 video system—a converter/charger and a VCR connector cable—were announced today by Eastman Kodak Company. The two new units offer users greater flexibility when linking the compact video system to either a television set or half-inch video cassette recorder (VCR) for playback of 8mm videotapes.

"Both accessories make it even more convenient to view 8mm electronic movies and offer users a wider range of playing 8mm videotapes," said Richard D. Lorbach, Jr., director of planning, Consumer/Professional & Finishing Markets.

When introduced earlier this year, playback was achieved either through the camcorder's viewfinder or via a VCR-sized device called a cradle. The cradle, designed as the system's primary playback component, can even be equipped with a timer-tuner to offer users full VCR features.

The new Kodavision converter/charger incorporates most of the electronic functions performed by the cradle, but its compact size makes it ideal for use away from home. The portable unit is about one-eighth the size of the cradle and weighs only 4 pounds. It contains an RF signal modular, an ac power adapter and a battery recharger. The unit operates on either 120 or 220 volts and at either 50 or 60 cycles. It can also simultaneously recharge two batteries.

The new VCR connector cable brings a new level of compatibility to 8 mm video. This cable permits users to link the Kodavision camcorder to any half-inch Beta or VHS VCR, or directly to a monitor to playback 8 mm video tapes or to dub half-inch tapes onto 8 mm.

The Kodavision series 2000 video system includes two integral camcorders designed for use with a new type of high-density 8mm video cassette. "The high-density video cassette made it possible to design compact and lightweight integral camcorder without sacrificing image or sound quality or desirable operating features," says Lorbach.

The Kodavision camcorders were introduced last January along with two accessories, the cradle and a tuner/timer module. The cradle is designed to be an attractive and useful addition to any home entertainment center. It provides safe and convenient storage for the Kodavision camcorder and functions as an interface between the 8mm video system and both television sets and half-inch video cassette recorders (VCRs). The cradle also serves as a power source for the camcorder and when used with the tuner/timer module, does double-duty as an 8mm VCR.

Kodak also announced Kodavision camcorder carry case, a rugged, canvas accessory bag, designed to carry a Kodavision camcorder, a converter-charger, appropriate video cables, spare batteries and video cassettes, and an easy-to-understand instruction manual. "This handsome silver and black bag weighs around 10 pounds when it is fully packed," says Lorbach. "It can fit under an airline seat, yet it's large enough to carry everything needed to make and view 8mm video cassettes."

List prices for the new accessories are $180 for the converter/charger, $40 for the VCR connector cable, and $70 for the accessory bag. All will be offered when the system becomes available to consumers this summer.

## New Plastic Sets, Props, Etc.

For the past three years, The Friendly Plastic Company, Ltd. (formerly Polymers Research) has made special effects polymers that were used or are being used in major motion pictures produced by Lucasfilm, Warner and Twentieth Century Fox. Ultraslime™ slime became Jabba the Hut's drool and was used on many other creatures in *Return of the Jedi*. This slime is thick and viscous, can be dyed with food coloring and holds up to hours of shooting under bright lights. The Friendly Plastic Company, Ltd. also sells Brittle Polymer™ resin used to simulate breaking metal objects, bones, and space ships. It has metal-like breakage characteristics. Clear Brittle Polymer™ resin, which has glass-like fracture characteristics and is based on a different chemistry, is available to simulate breaking glass.

Last year, they introduced their best special effects polymer ever, Friendly Plastic™ compound, a revolutionary plastic that is so simple and easy to use that almost anyone can make almost anything with it using just their fingers and simple hand tools! In fact, it is the first 'personal plastic'—the first heat processable plastic intended for personal instead of industrial use. You can use it to make props, setups for cameras, holding clamps for microphones, mechanisms for inside creatures and working models and skeletons for foam creatures. It is convenient to use for many applications where tape is not ideally suited.

Friendly Plastic™ compound is a tough, almost unbreakable plastic, yet when warmed slightly you can shape it with your hands. Objects made from Friendly Plastic™ compound: 1.) are permanent immediately after they are formed without baking, kiln firing, or bronze casting, 2.) don't droop and are self armaturing, 3.) are extremely tough and rugged, 4.) are light and easily portable, 5.) can be drilled, carved, and machined, 6.) can be easily colored with permanent markers, acrylic paint markers, clothing dye, spray paint, or model paint, 7.) can be made sticky by heating and will adhere to plastics, textiles, foil, textured wood and small objects, 8.) can be glued to many other materials.

Friendly Plastic™ compound comes in rice-sized pellets which soften and fuse together in just 15 seconds when they are sprinkled into boiling water. Once softened, you can form the melted plastic with your fingers like clay. It hardens in about ten minutes but can be remelted at any point. You can carve it like wood or work it like clay over and over again until you are completely satisfied.

Permanent ink marking pens and acrylic paint pens can be used to draw on the surface or paint it. Your model can be dyed brilliant colors by soaking overnight in a cool solution of clothes dye.

Friendly Plastic™ compound adheres strongly to tough rigid and soft vinyl and will also stick to styrene, ABS, SAN, acrylic, cellulose acetate and CAB. It will not, however, fuse to polyprophylene or polyethylene. Auto body putty as well as Freeman Supply's Tuf-Fil™ and Tuf-Carve™ pattern makers putties will adhere to the surface. These materials are excellent for use with Friendly Plastic™ compound if heated to make it tacky first. You can embed beads, wire, cloth or hair.

In addition to its versatility, Friendly Plastic™ compound is a better modeling medium than clay. When clay is applied to wire armatures, the major design elements are defined early in the process. With Friendly Plastic™ compound, a craftsman or artist can make significant design

changes at any point as the piece develops a life ot its own. Because Friendly Plastic™ compound is both strong and self-supporting, it has great design flexibility. It can even be shaped into the thin, exotic form of a flower or a leaf and colored or finished to almost any effect. Because it is so light and strong, the props are easy for actors to lift and use.

Friendly Plastic™ compound is easy to mold too. Simply place a piece with a flat bottom down and surround it by a cardboard and Friendly Plastic™ compound dam. Plastic supply houses sell Dow Corning's Silastic RTV rubber and curing agents. The RTV rubber is mixed with the curing agent and poured into the dam. Usually, it works best to select a curing agent that takes a full 24 hours to set up. This assures that it will not set up before you have time to finish your mold. Never use modeling clay as part of the dam. Silicone rubber will not cure in contact with modeling clay. The sulfer in the clay deactivates the platinum compounds that makes the curing agent work. Once the mold hardens, you can remove the pattern and fill the mold with Friendly Plastic™ pellets. Bake the mold, plastic and all, at 150° F in your oven 20 minutes or more. Let it cool for several hours before removing an exact duplicate of your original.

Friendly Plastic™ compound will soon be available in most art supply stores, however, the remaining items offered for sale must be ordered directly. To receive your own copy of The Friendly Plastic Company's special effects catalog, please write or call:

The Friendly Plastic Company, Ltd.
2888 Bluff Street #233
Boulder, CO 80301
(303) 530-5115

## Fluorescent Supplies

Shannon Luminous Materials, Inc., has recently been purchased by Richard F. Cruce. The 55 year old firm produces a complete line of black lights, fluorescent inks and coatings and industrial fluorescent quality control tracers. It was founded in 1928 by black light pioneer John T. (POP) Shannon. He was one of the first users of black light (long wave ultra violet light) and fluorescent materials for the production of the 1907 Ziegfield Follies in New York.

Development of the firm was continued by his son-in-law and successor, James T. Alberger, who added fluorescent quality control tracers to the line of products. These tracers have wide uses for quality control inspection in both industrial and military applications. Originally located in West Hollywood, the firm has recently been moved to more modern production and R&D facilities in Santa Ana, California.

## Edmund Catalog

Edmund Scientific's 1984-85 Winter Catalog contains 52 pages of diversified products in full color. Scores of new products are included. Product descriptions are presented in easy-to-read type.

Products run the gamut from simple to sophisticated, and are priced from $2.95 to



$549.00. Product categories include: watches, telescopes, magnifiers, magnets, toys, games, electronic products, and do-it-yourself items.

A catalog can be obtained at no charge by writing to Edmund Scientific, 1010 E. Gloucester Pike, Barrington, NJ 08007 (609) 547-3488.

Edmund also is offering a 100 page Industrial Catalog priced at $2.00 which contains a full line of optics and optical instruments and many other technical products which is for sale to consumers as well as industry.
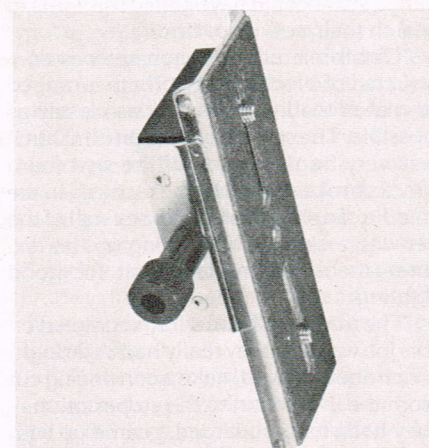


## Quick Release

Made of stainless steel, this extra solid accessory with large 6 x 2″ top plate can be mounted on any Gitzo (or other) tripod head with ¼″ or 3/8″ screw, providing quick release for photo, video or cine cameras up to 20 lbs. The vertical side plates are 1″ high and bent inward on top, holding the soft cushioned, heavy duty top plate rigidly in place. Guided by two strong pins, the locking bolt with easy-to-turn knurled knob moves one of the side plates in and out. If the knob is tightened, it locks both the side and top plates absolutely firmly. If the knob is loosened by ½ turn, the top plate can be slid 1″ forward and 1″ backward or 1″ left and 1″ right and locked for different camera positioning without any danger of falling out. In addition, the two camera screws ¼″ (or 3/8″) can be shifted in two slits of 1½″ length. A screw can also be mounted in the center of the plate. If the knob is loosened by three full turns, the top plate can be lifted out completely, together with the camera. Additional top plates with screws are available. Full five Year Gitzo Warranty Buyer Protection. Price: $59.95

## Polaroid's 8mm Video System

Polaroid Corporation announced today a collaborative agreement with Toshiba Corporation of Tokyo, Japan for the development and marketing of state-of-the-art home video camera and recording systems.

The first product resulting from this agreement will be an 8mm home video system. Scheduled for introduction in North America late this year, the Polaroid system consists of a compact, lightweight, combination 8mm camera and video recorder (camcorder) with built-in microphone for high-fidelity audio recording, multi-function playback deck and 8mm video cassettes capable of 90 minutes of recording.

The Polaroid 8mm camcorder features an advanced charge-coupled device (CCD) image sensor for excellent color tone, low power consumption, high resolution and sensitivity. All power for camera operation is supplied by a rechargeable battery in the camera handle.

For instant playback, the camcorder is easily inserted into the playback deck connected to a television set or video monitor.

The new Polaroid system accepts 8mm video cassettes, about the size of audio cassettes, with either metal particle (MP) tape or metal evaporated (ME) tape.

Owen J. Gaffney, Polaroid Group Vice President, Magnetic Media, said, "The Polaroid 8mm system is the first in a series of new consumer video imaging products to be marketed by the company in the future."

Polaroid's entry into the video recorder market follows the company's recent introduction of Supercolor VHS and Beta video cassettes, as well as a line of premium quality floppy disks.

The company also markets several computer peripherals for "instant hard copy" from video display terminals, including the new Palette color image recorder for instant slides or prints of computer graphics.

A new Polaroid micro-electronics laboratory is now under construction in Cambridge, Mass., dedicated to electronic imaging processes and information storage and retrieval technology.
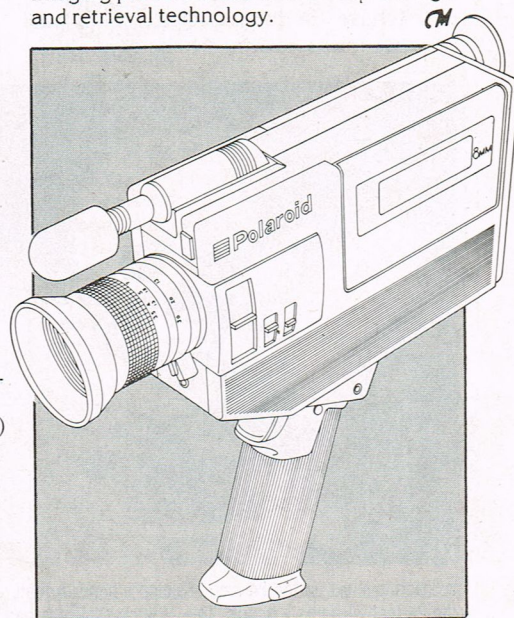
# Dead

These could be easily removed to adjust the tension of the joint with an Allen key.

"There's always a balance with armatures as to where they have to be strong and where you can afford to have them weak. The leg armatures had to be strong to support the weight of the models, so they were made of metal rods with hex joints. The arms, were very weak. They were made of braided silver/lead wire—which I thought gave them a better response than aluminum armature wire—but they were so fragile that they broke and had to be replaced after two days of shooting.

"One problem we had in aging the skeletons" Wallach recalls, "was in matching the silicone rubber to the plastic bones. We used universal tinting pigments, which we further aged with magic markers once the pigments gave us a base that the magic marker dyes would adhere to.

"The armatures for the smaller, 12-inch skeletons differed from the 24-inch closeup model in a few respects. The larger model's spine was drilled and snaked through with armature wire after the vertebrae had been almost completely separated from each other by cutting between them. This was cosmetically more appealing than the goose-neck spines in the smaller skeletons, but not as flexible. It was important to do this because the close-ups on the larger model showed more detail and a goose-neck spine might have looked unrealistic in close-up. Also, the finger bones on the larger model were drilled through and strung with armature wire. The fingers on the smaller skeletons were simply armature wire covered with silicone rubber. Another difference between the 24-inch skeleton and the 12-inch ones was that the 24-inch model didn't have tie-down sockets. This was because it was designed to be shot either from the waist up or from the waist down, so we didn't need tie-downs to hold it in place.

"After we had spent a couple of days meticulously aging the skeletons, we visited the set in Astoria [Queens, New York] where the Jacksons were filming the live action. They had bought several real skeletons, but they were bleached white, and didn't match our carefully aged stop-motion models. I didn't think that the bleached skeletons were aesthetically correct and I was worried about how they would match our models. I wished they had bought plastic skeletons and let us age them."

Fortunately, the real skeletons were just in the background as set decoration and were never shown in close-up, so there isn't any noticable matching problem in the finished video.

"Another matching problem we encountered was that they decided to change the color of the live-action set by adding blue when they color-timed the film," Wallach reveals. "We had been told the set was supposed to be brown and black. Again, I wished we had been consulted so we could have gelled the lights to match their new color timing.

"Our miniature dungeon set was constructed of blocks of styrofoam arranged to match the live-action set as closely as possible. The set looks great on film, but it was very fragile. Some of the styrofoam blocks broke and had to be repaired in the middle of a shot. We lit the back wall of the set with a skim light to bring up the texture—there's no replacement for good lighting.

"The major problem we encountered on this job was that they really hadn't thought much about how to make a convincing cut from the live-action to the stop-motion—they hadn't storyboarded. I came up with the solution after seeing some of their live action footage. They had a shot of a girl cracking a whip and I thought it would make a perfect cut on the action if we animated a shot of a skeleton getting hit with the whip. It gave them the option of cutting anywhere on the action and the sound of the whip strengthened it by making it a sound cut as well as a visual cut. After the skeletons get hit with the whip, they shake off their cobwebs and start break dancing.

"Mike Tobacco made a great little discovery that we used to create the cobwebs. He found that if you tilted a can of 3-M aerosol glue that's used for gluing foam rubber, the glue comes out in wisps that dry looking exactly like cobwebs. We even animated the skeletons striking the famous Jacksons' 'victory' pose and added a few more cobwebs in between each frame so it looked like the cobwebs were just appearing out of nowhere and by the end of the shot the skeletons were completely covered. Unfortunately, the shot was cut from the final video.

"We rotoscoped some of the Jacksons' moves to use as reference, so we could make the skeletons dance just like the Jacksons. We used other references for other moves."

There's a shot in *Torture* in which one of the skeletons makes a complete 360-degree flip in the air and then gets down and spins on his shoulder blades and winds up as a pile of bones." I studied Muybridge photographs of a man doing a 'tuck' dive as reference for the flip move," Wallach continues. "I mounted the skeleton's pelvis on a rod, which I concealed by placing it behind the skeleton directly along the axis of the lens. I was using a one-point light source to bring out the relief detail of the skeletons—skeletons don't look good under flat lighting. Unfortunately, the shadow of the rod showed and there was no way to change the lighting to eliminate the shadow. After deliberating with Mike Tobacco, we painted several other lines in the set floor to suggest light beaming down through a barred dungeon cell window."

There's a stop-motion shot in *Torture* where a skeleton does a backwards "glide" or "moon walk"—that's the break dance move in which the dancer gracefully walks backwards while appearing to walk forwards. "The 'glide' shot was animated simply by mounting the skeleton model on a rack-and-pinion movement and animating a forward walk cycle while simultaneously moving the rack-and-pinion back one increment for each frame," Wallach explains matter-of-factly. Who says cinemagicians never reveal how they accomplish their tricks?

"By the time all of our stop-motion models were ready, we only had four days to shoot 30 seconds of animation," Wallach remembers. "We were under a lot of pressure to complete the job as fast as possible, so we had to work fast and hope for the best because there wasn't any time for retakes. Another thing that bogged us down was that we were also doing the optical 'glows' for the video at the same time.

PHOTOS: DAVID DUMONT

Wallach touches up the 24-inch skeleton's hand. Armature wire was threaded through all of the tiny bones of the 24-inch skeleton's hands. The 12-inch skeletons had armature wire fingers covered with silicon rubber.

Wallach works on detailing the 24-inch skeleton's teeth. All of the fine detailing makes the skeletons look incredibly realistic in the *Torture* video. The skeletons took a total of about six days to construct and touch up to prepare them for shooting.

"One of the things that saved this shoot was that we shot everything with two-camera set-ups. We shot each scene as a close-up and a wide shot so they could intercut on the action and extend the scenes if they needed to. For example, where the skeleton spins around you can get six spins out of three animated spins simply by cutting to the second camera at the appropriate point in the action. I don't have a second Mitchell, so I used my Bell & Howell, which is sort of a 'blind' camera. We just pointed it in the right direction and hoped for the best. In some cases we were lucky and in some cases we weren't—but it really saved the day.

"On the very last day of shooting we discovered we were about one or two close-ups short," Wallach admits. "Ever since Movielab went out of business, the fastest you can get your rushes back in New York is eight to ten hours. I needed to have my film back in four hours! After much sweating and fretting, I had a brainstorm: I decided to shoot these last close-ups on color slide (still) film and send them to a still lab for processing. I went out and bought a 100-foot roll of Ektachrome 50 Tungsten, which I chose because it's the slowest, finest grain film available. I loaded it into my Mitchell and shot 30 feet. I rushed it off to T.R. Color because they said they do up to 100 feet in three hours. They did a fantastic job and we wound up using the footage in the video instead of just using it as rushes to check our lighting and animation choreography. As an added bonus, the fact that Ektachrome tends to shift a little towards blue helped us match the animation footage to the blue they added to the color timing of the live-action footage.

"Another thing we did because we were so rushed was to pre-drill all of our tie-down holes," Wallach recalls. "Usually when you choreograph an animation move, you'll determine exactly where your holes are going to be. We didn't have time for that, so we just took our plexiglass animation stage and drilled about 5,000 holes in it and figured that there'd be a hole within an eighth of an inch of anywhere we'd need a tie-down hole. We covered the plexiglass with a sheet of newspaper and added a thin texture of Celuclay over that. We used a scribe as a probe to find the nearest hole and poked it through and attached the tie-down from underneath.

"I'm very happy with the way this project worked out," Wallach concludes. "I enjoy creating quality animation that satisfies my artistic tastes. Some of the commercial jobs that I take on don't inspire me the way a job like this does, although I always do the best job I can and they help pay the rent. I enjoy doing effects work for rock videos because the concepts are usually more artistic than most commercial jobs. Right now I'm involved in creating the stop-motion alien effects for a rock video by Peter Wolf called *Mars Needs Women*, which will spoof the old science fiction "B" movies of the 50s. I'm finding this new project to be very fun and satisfying as well, I'd love to branch out and start creating the special effects sequences for feature films."

Unlike many of the independent films covered in CINEMAGIC that lack wide distribution, the Jacksons new *Torture* video will undoubtedly be seen eventually by virtually all CINEMAGIC readers. As a CINEMAGIC reader, you'll have special insights into how the stop-motion effects for *Torture* were created that the general public and even most filmmakers will miss. But that's *their* tough luck! *CM*

**Above:** Don Sahlin (left) and Joe Horstman make minute adjustments to the kinemins from the trap door access in the set.

**Below:** A closeup view of the kinemin puppets. A special tool was required to move the eyes and the armature joints could be locked into position.



PHOTOS: COURTESY OF PAUL MANDEL

# Myerberg

and had worked for Burr Tillstrom on a *Land of Oz* television pilot, was one of the first Myerberg hired. Sahlin went on to become a member of Projects Unlimited and the creator of Kermit the Frog for Jim Henson. Kermit Love was a puppeteer, ballet dancer, and costume designer for Agnes DeMille who also became a key muppet maker for Henson. Teddy Shepard was another alumnus of *Howdy Doody* (she created the Dilly Dally character). Other animators on *Hansel &*

*Gretel* were Danny Diamond (a ballet dancer), Joe Horstman and his wife Inez (actors), Sky Highchief, and Roger Caras. Myerberg gave them a three-week "animation training period" and they were assigned various puppets based in part on the quality of their work. (In the case of Teddy Shepard, though, Myerberg adhered to the stereotyped idea that a female animator would be best suited to handle Gretel.) Almost all of the animation shot after this test period was used in the final film.

As far as Myerberg was concerned, no entrepeneur was worth his salt unless he had a gimmick to sell. Consequently

*Hansel & Gretel* fell prey to a blatant publicity hoax. In the film's souvenir program, he insisted that the *Kinemins* were "electronically controlled to make every human movement," described the armature as some kind of gizmo with "feelers" capable of "sensing" the next position of the figurine, and trumpeted the unveiling of "electronic heads" for camera closeups which were "capable of some 800,000 different expressions controlled by electrical impulses from a twelve-unit, specially designed machine."

In reality, closeup expressions were achieved manually with cable controls. It worked remarkably well. Peter Ianucci de-

signed a "dial board" with twelve knobs. When a knob was rotated, a steel cable attached to the interior of a large version of the puppet head would distort the foam rubber. The only thing "electric" about *Hansel & Gretel* was the magnetic support system. To perpetuate the hoax, Myerberg went so far as to have one of the animators appear on television with a large head of the Witch and a souped-up "computer box," which was nothing more than Ianucci's invention in disguise. (The gimmick worked. A year later, the Nassour Brothers tried the same by insisting that their dinosaur in *The Beast of Hollow Mountain* was an electronically controlled puppet, when in fact their "regiscope" process was rather crude stop-motion enhanced by a full figure replacement cycle for a shot or two. Even Ray Harryhausen jumped on the bandwagon, though far more subtly, when the pressbook for *20 Million Miles To Earth* announced a new process called "electrolytic dynamation".)

Storyboards for *Hansel & Gretel* were all incremented to the musical score. For the inexperienced animators, this became problematic, since specific movements of the figures had to coincide with the rhythm on the soundtrack. Making matters wrose was the fact that Myerberg and his backers wanted to see *dailies* in the projection room. On a typical day, the producer could be seen cracking the whip by casing the studio and demanding "More footage, more footage!" The Barnum & Bailey atmosphere obviated

any chance for quality control, and with the evening shift having to continue a scene started by the day shift, the animation was spotty at best.

Still, the workmanship in *Hansel & Gretel* is awesome. Some of the puppets stood two feet tall. Cherubic and stylized, the detailing included fingernails and real hair (although none of them had *teeth,* which was rather bizarre in the case of Hansel and Gretel). The mother and father figures were sculpted to resemble Mildred Dunnock and Frank Rogier, who supplied their voices. Dajevskis' sets with their protuberant houses and trees were more elaborate than anything that had been done by Rankin & Bass, and the film's striking use of color was alone worth the ticket price.

*Hansel & Gretel* reaped a healthy profit when it was released in 1954. Myerberg's film company continued to ballyhoo the wonders of "electronic kinemins" which catered well to the burgeoning TV market. The first Jolly Green Giant was a Myerberg puppet sculpted by James Summers, and Hazel Bishop lipsticks danced out of his studio onto the twelve-inch tube. Summers also created a model of Speedy AlkaSeltzer which was never used (for whatever reason, Speedy's animation was done at the Swift-Chaplin studio in Los Angeles). Other Myerberg spots were done for Ivory Soap Flakes (a mother and baby) and Ehler's coffe (a butler), and figures of the Kools cigarette penguin and Li'l Abner were made to attract potential

clients. (This writer clearly remembers owning a set of View Master slide wheels in 1954 featuring *Jack and the Beanstalk* characters in miniature sets, which smacked of Myerberg's style.)

Unhappily, after their novelty peaked in the fifties, the demand for Myerberg's product diminished. Though his employees' salaries were low, the show became too costly to maintain. All plans for future stop-motion films were abandoned and Myerberg returned to Broadway. The fantastic *Hansel & Gretel* sets were cut up, carted away, and eventually sold to an amusement park where they were poorly reconstructed in a tent for display. Then, tragically, in 1955, vandals looted the East Second Street studio and smashed the remaining kinemins to bits. The armatures, which were works of art, were beyond repair. Hoping that one or two models might have been carried away as curios, Myerberg informed the police that the puppets' skin was highly toxic to humans, hoping to instigate a more dramatic search. But the melodrama failed in its intent, and the kinemins were no more. Myerberg passed away in 1974.

Unlike the Rankin-Bass puppet features, **Hansel & Gretel** never enjoyed normal distribution on television. It became an oddity to be relished in revival theaters by stop-motion afficionados and those who respond to twinges of nostalgia. It may enjoy a following someday for sheer showmanship. Myerberg had his competition beat hands down. **CM**

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# CINEMAGIC BACK ISSUES

**#2**—Spaceship Model Making; Blood Makeup; Smoke Generator; Light Beam Effects; Making an SF Logo.

**#3**—Robot Construction; Developing an Animation Style; Fluid Art Animation; Electronic Special Effects:

**#5**—Aerial Image Optical Printer—Usage; Widescreen Super-8; Slit Scan Effects; Gleaming Eyes for Stop-Motion Models.

**#6**—Amazing Electronic Gadgets—cheap!; Bring Your Alien to Life—Latex Masks; Basic Editing Techniques; Invisible Man Effects.
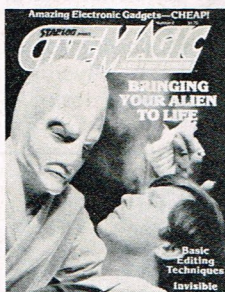
**#7**—Basic Cartoon Animation; Claymation; Kaleidoscope Effects; Profile—Damon Santostefano.
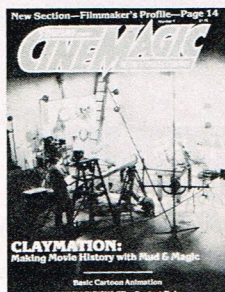
**#8**—Video Tape Transfers; Reverse Filming Effects; Lab Services; *Clash of the Titans* Preview; Profile—Paul Vitous and Mike Antonucci.

**#9**—Animating Pogo; Lithographic Film Titles; Sets on a Shoestring; Profile—The Langley Punks.

**#10**—Mastering Mattes; Zero Budget Sets; CINEMAGIC/SVA Awards Night; Building a Super Soundtrack; Pen Set Ball-and-Socket Armatures; Profile—Joe Ritter.
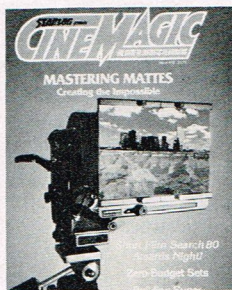
**#11**—Glass Shots; Miniature Explosions; Figure Animation; Bloody Hair Hunks; Profile—Koch and Lohr.

**#12**—Makeup Magic—Latex Appliances; Rotoscoping; Zero Budget Ray Gun; Profile—Dean Barnes and Greg Gilger.
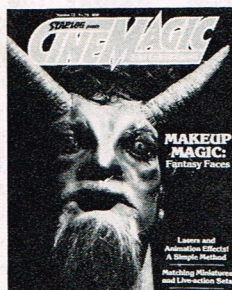
**#13**—Slit Scan; Creating UFO "Lightships"; Model Interiors; More Electronic Special Effects; The Saturn Machine; Profile—Bonnie Borucki.

**#14**—Storyboarding; Sound Effects Generator; Miniature Devastated Cities; Charles Jones' 16mm Space Epic. Profile—Jerry Parisi.
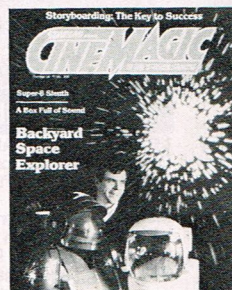
**#15**—Script Writing; Miniature Lighting Special Effects. Careers—George Lucas and John Dykstra; Super Depth in Dioramas; Profile—Ralph Miller.

**#16**—Script Writing, Part 2; Electronic SPFX—LED Circuits; Flat Art Explosions; Careers—Frank Van der Veer; Build Your Own Camera Crane; Profile—Steve Parady and Bill Rudow.

**#17**—Script Writing, Part 3; Production Managing Low Budget; Electronic SPFX—Light "Chaser"; CINEMAGIC/SVA Contest Rules; Secrets of Graphic Gore; Profile—Chris Callaghan and Bob Griffith.
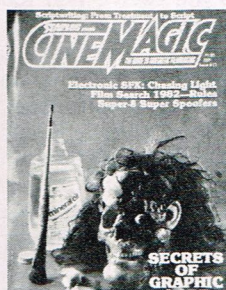
**#18**—Making Monsters; Tie-Downs for Animation Models; Accessories for Filmmakers; Electronic SPFX—Redesigned Sound Generator; Profile—Al Magliochetti.
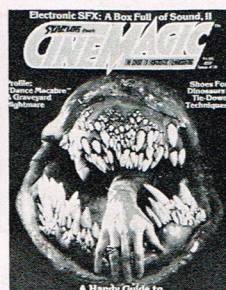
**#19**—CINEMAGIC/SVA Awards Night; Build Your Own Cob Web Spinner; High School Werewolf; Careers—George Melies; Electronic SPFX—Lighting Gadgets; Front Light/Back Light Animation Technique.

**#20**—Articulated Full Head Masks; Dream Screen; Precision Ball-and-Socket Armatures Parts; Electronic SPFX—Sync Strobe; Profile—Joey Ahlbum.

**#21**—Custom Spaceships; Electronic SPFX—DC Strobe; Careers—Robert Short; Foam Rubber Build-up Method; Creating a Monster; Profile—Deborah Von Moser.

**#22**—Miniature Landscapes; Electronic SPFX—Strobe Accessories; Title Spinner; Ball-and-Socket Armature Parts; Making Creature Makeup; Profile—David Casci.

**#23**—Microcomputer Animation; Make Your Own Cross-Star Filter; Animation Armatures; CINEMAGIC Back Issues Guide; Mark Sullivan's *Highrise*; On Location—*Zyzak is King*.

**#24**—Awards Night; Scratch-Building Model Spaceships; Glowing Eyes for Creature Masks; Animation Tips; Easy Armatures; Careers—Roger Corman's Millennium Studios; EZ Effects—Make Your Own Fog Filters.

**#25**—Build Your Own Camera Stabilizer; Color Filter FX; Shooting Publicity Stills; Make Your Own Armor; Electronic SPFX—Digital Frame Counter; On Location—*Dr. Dobermind*

**#26**—Hand Puppet Monsters; Electronic SPFX—Intervalometer; "Star Zoomer"; Three-Headed Armature; "Is Stop Motion Dead?" Melting Man FX; Animator Tony Laudati; On Location: Mendel Marks.

**#27**—New Double-size format! The Art of Stop Motion; Split-Screen FX; Rear Screen Techniques; Supply Sources; Sculpting Clay; Jimmy Picker's *Sundae in New York*; Miniature Planets; Ripple Title FX; Casting Molds; Careers—Jim Danforth, Part I; Armatures; On Location—*Raygun's Nightmare*.

# Ray Beams the Easy Way!

*Build this simple ray beam effects box and start blasting!*

By JACK IMES, Jr.

Laser-style rays, phaser beams and photon torpedoes can be a snap to add to your next film with a simple optical device made from cardboard. This "FX BOX" lets you superimpose straight beams, swiftly moving light balls (torpedoes), or simple glow effects on any shot. It can be used for both normal shooting and stop-motion model work.

**Step 1:** Use Figure 1 as a guide to draw the box pieces on a sheet of artboard. The artboard is special-white on one side, flat black on the other. It can be found as "matte board" in any art store. Cut the pieces with a sharp art knife or heavy-duty paper cutter.

**Step 2:** Use the "A" piece of Figure 1 and trim a ¾-inch strip from the long side to make a square. Draw two diagonals across the corners to find the square's center. This is where the camera lens will be located. Use the compass to draw a circle for the lens hole. After you cut out the hole, use a dry marker to blacken the edge of the cut paper.

**Step 3:** Use Figure 2 as a guide for cutting the balsa wood strips to correct size. These strips serve as supports to hold later materials in position. Use ordinary white glue to attach the soft balsa to the art board. You will be gluing the sticks to the *black side* of the board pieces. Also note that Figure 2 is of the *right wall* piece. You must reverse the arrangement when you make the *left wall*! Mark each balsa piece as seen in Figure 2 to avoid mixing the pieces. Also use a pencil to draw where each piece is to go on the artboard pieces.

**Step 4:** After you have completed the above steps, check your arrangement as seen in Figure 3. You can now assemble the box by simply using strips of two-inch wide masking tape. In Figure 3, the tape is on the back of the section edges with a 1/16-inch separation to allow for later folding.

**Step 5:** Cut two balsa sticks to 5½-inch lengths. The two sticks form cross supports for the box sides. One stick is glued above the sidewall "A" sticks and at the top end of the "C" sticks (Refer to figure 4).
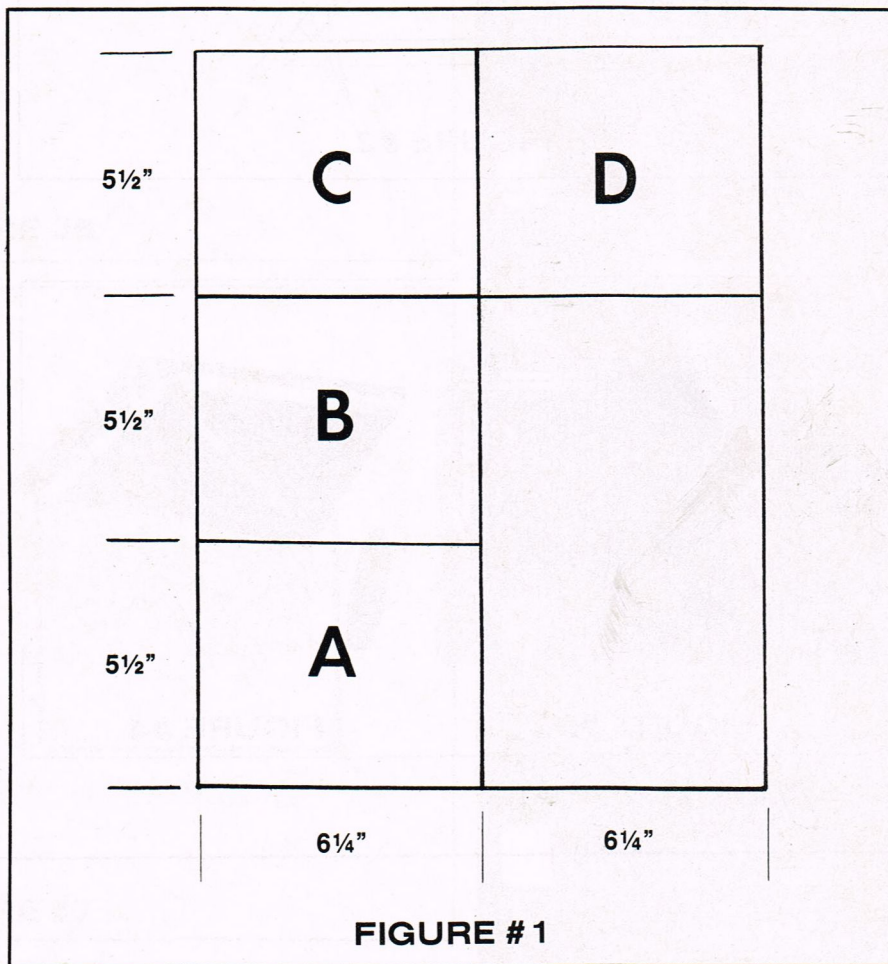


**FIGURE # 1**

The lower stick should be tipped at an angle to be flush with the 45-degree angle of the sidewall "C" sticks. Straight pins pushed into the artboard and into the balsa add extra support to the cross pieces.

### Splitting Beams

**Step 1:** Make a simple pellicle beam-splitter with a piece of stiff acetate obtained from an art, hobby or office supplier. The sheet should be clear 10-mil acetate, about the thickness of a file folder. Cut the sheet to 7½x5½-inches.

Be careful to avoid scratching or indenting the soft plastic to preserve optical clarity for later use.

**Step 2:** Slide the acetate sheet into the box along the two "C" stick supports. The sheet should rest at the 45-degree angle with almost no sagging in the middle.

### Stenciling Rays

**Step 1:** Cut a 5½x5 3/8-inch piece out of the remaining artboard. This sheet will serve as a stencil sheet to fit into the top of the effects box. To make the ray itself, you

**FIGURE #2**

Labels in Figure #2:
- 5½
- ¼
- D
- A  B
- C
- RIGHT INSIDE
- 5½
- 45°
- 6¼
- Ⓐ 5½"
- Ⓑ 5¾"
- Ⓒ 6¾"
- Ⓓ 5"



**FIGURE #3**   **FIGURE #4**



A          B          C
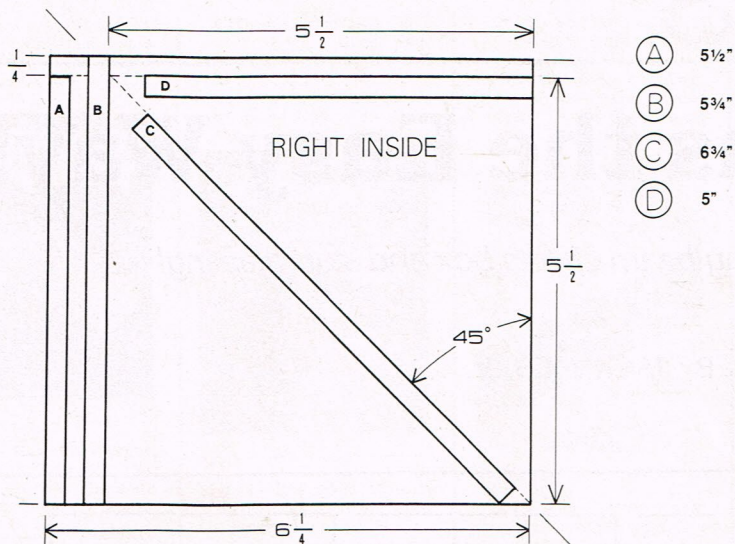
**FIGURE #5**

must cut a narrow slot (or stencil) about 1/8-inch wide across the sheet. See Figure 5 for several sample ray stencils. Your stencil, of course, must be matched to whatever subject is in your shot. Use the samples as a guide. When planning your cut, remember that the *black side* of the sheet faces the inside of the box.

**Step 2:** Cover the stencil opening with a slightly larger cut-out of tracing paper. This paper acts as a light diffuser to give the proper "glow" effect to the ray. The diffuser paper is taped onto the top (white side) of the stencil artboard. You can color the diffuser with a color dry marker or use scrap pieces of color acetate taped over the diffuser to add bright color to your beams. Ordinary transparent tape works well to hold everything in place.

### Shining Light

A light source is needed to shine down on the stencil sheet with enough intensity to give proper exposure of the ray on film. I usually use an ordinary gooseneck-type desk lamp and have, in the past, also used a flashlight and even photographic "strobe" flash units for location filming. Whatever lamp you use, make sure that it is anchored securely to keep it from shifting after you've set up your shot. The lamp bulb should be positioned about two inches above the stencil slot to give maximum intensity along the slot length.

### Getting Set

**Step 1:** Place the box, camera, light and model subject as seen in Figure 6. This is a general guide for any use of the ray effects. With a stencil in the box, turn on the lamp. You should see a bright light ray superimposed over the scene when you look through the camera viewfinder. Make any adjustments in the model's position to make the ray appear to emerge from the proper point.

**Step 2:** To make the ray "flash," either turn the light off and on quickly, or use a scrap piece of artboard to cover and uncover the stencil slot on cue. In this way, you can accurately time the ray to appear as scripted.

### Photon Torpedoes

To make a "photon torpedo"—a rapidly moving ball of energy—you must make a *second stencil* to partially cover your first stencil. By moving the top stencil you create the *illusion* of moving light. Figure 7 shows the pair of stencils. You can experiment with the effect by taping different color acetate pieces along the bottom stencil slot. As the top stencil is moved, the photon torpedo will appear to change colors as it streaks across the scene. A dark background in the scene helps intensify this and other ray effects.

### Matte Magic

The front slots in the effects box can be used to selectively mask or filter parts of

**FIGURE #6**

LIGHT

L

STENCIL

CAMERA

MODEL

BOX

**FIGURE #7**

A

B

ART: JACK IMES, JR.
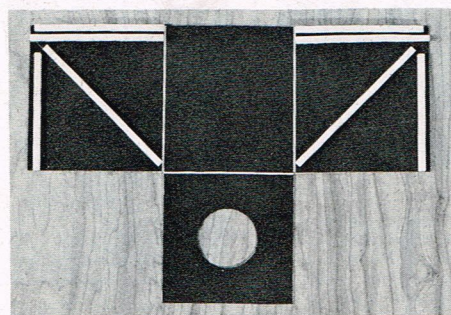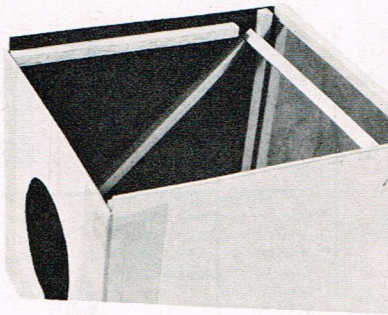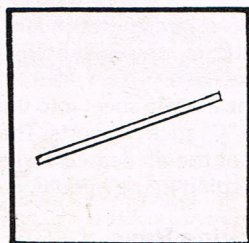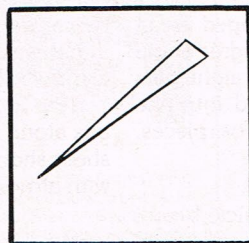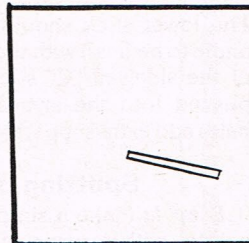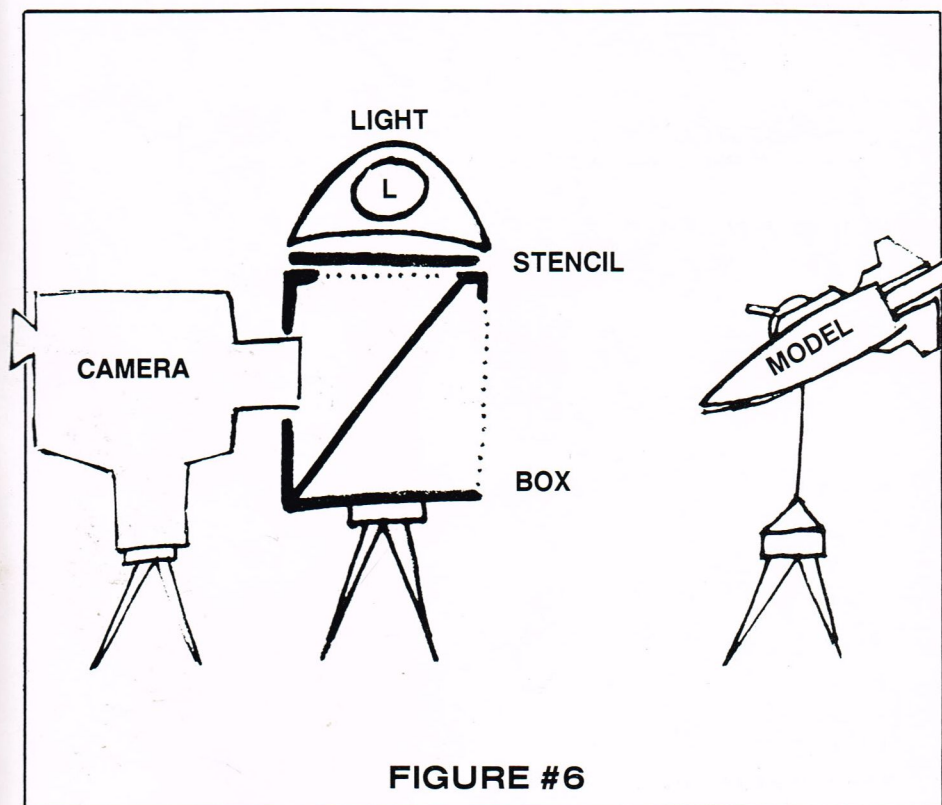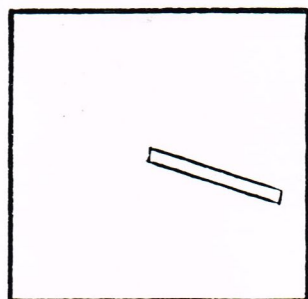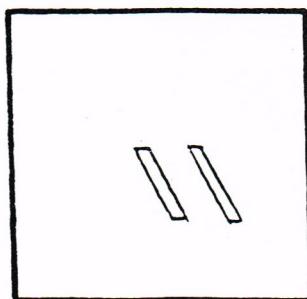
the scene in front of the camera. When I use the FX BOX to add light rays to my stop-motion work, I use the front slots to hold acetate color filters. These filters go from yellow to deep red and overlay the shot after the ray "hits" the subject. I shoot a few frames for each filter to give "heat effects," then remove the filters completely for a "back to normal" scene.

The E-Z Effects Box can offer an impressive number of optical light effects usually done on the laboratory optical printer. It also saves you the guesswork and problems caused by pin-scratching or bleaching your valuable original footage

to make ray effects. So, use your imagination and the box to create "bright" ideas in your next film! CM

## Materials

Artboard sheet, black/white, 17x13 inches
Balsa sticks, ¼ inch x 36 inches (2 pieces)
4 straight pins
Acetate, clear, 10 mil thick, 8x10 inches
Acetate, various colors (optional)
Tracing paper, 8x10 inches, 1 sheet
White glue (Elmers)
Art knife, scissors, compass, pencil, ruler
Masking and clear tape
Protractor (for 45 degree measure)
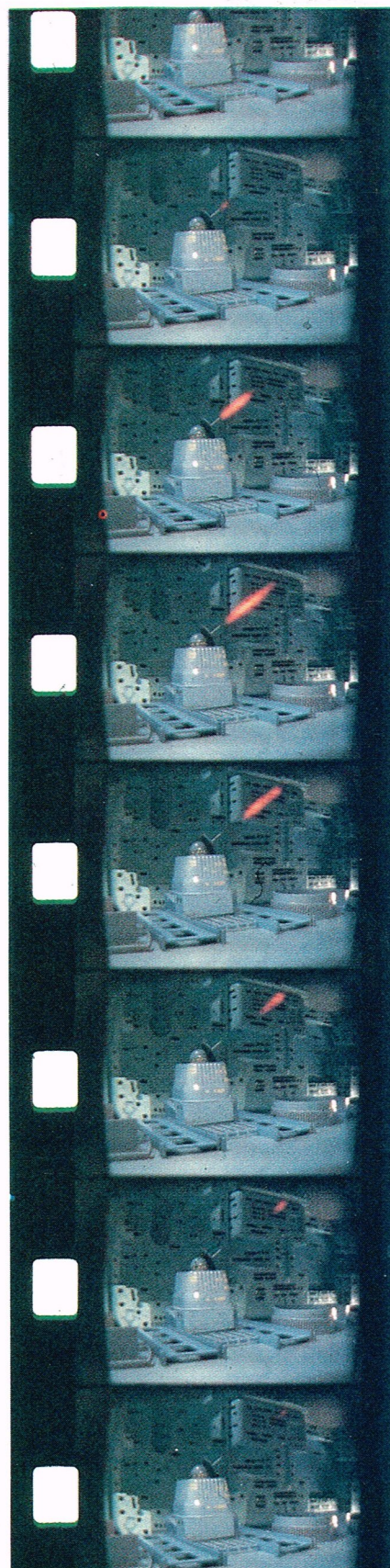
The final effect of a short burst from a laser cannon seen on Super-8 film.